2453

A

TREATISE

ON THE

DISEASES of CHILDREN,

WITH

Directions

FOR

THE MANAGEMENT OF INFANTS

FROM

THE BIRTH.

By MICHAEL UNDERWOOD, M. D.

LICENTIATE in MIDWIFERY
of the
Royal College of PHYSICIANS in LONDON;
PHYSICIAN
To Her Royal Highness the PRINCESS of WALES;
And late SENIOR PHYSICIAN
To The BRITISH LYING-IN HOSPITAL.

IN THREE VOLUMES.

VOL. I.

THE FIFTH EDITION, REVISED AND CORRECTED.

Ornari Res ipsa negat, contenta doceri. MANILL.

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TO THE

2453

QUEEN.

MADAM,

HIGHLY honoured in the Permiſſion of laying this Work five times at your MAJESTY's Feet, it has been my Ambition to render each Impreſſion, in ſome Degree worthy of ſo high a Patronage. The Advantages reſulting from Time and Experience have been eſpecially cultivated to render this Edition as complete as my other Employments, and my Abilities would allow. Should it ultimately afford that Benefit to my fellow

Creatures at which I have been induſtriouſly aiming, the Public will be greatly indebted to your MAJESTY's kind Auſpices. On this Account, as well as the Queen's known Goodneſs, there is no Perſon to whom the Work could with ſo much Propriety be addreſſed.

I have the Honour to be,

With the moſt grateful Obedience,

Your MAJESTY's

Moſt devoted,

And moſt obliged Servant;

Michael Underwood.

PREFACE.

THE repeated and indulgent reception of former attempts to inveſtigate the Diſeaſes of Children, has induced the author ſucceſſively to extend his original plan. And he hopes he may have ſo far ſucceeded, as to preſent the readers of this fifth impreſſion with an ample and diſtinct account of them.

Beſides ſomething new in the form of the work, it contains ſeveral diſeaſes never noticed before, as well as further improvements in the arrangement and deſcription of others; together with compleat *Directions for the Management of the Nurſery*, to which is prefixed a Diſſertation on the nature and properties of Human-milk, the reſult of repeated experiments; forming, it is preſumed a ſuitable Introduction to that part of the work.

If any thing at all Important has been overlooked, it has arifen as well from the frequent occurrence of fome new difeafe, as from a poffible want of peculiar opportunities of information, which the writings or practice of others may, in fome inftances, poffefs. He has availed himfelf, however, of every advantage he could command; and is indebted to one or more friends for fome valuable communications, which will be acknowledged in their place. He has at the fame time endeavoured to avoid all unneceffary details and ufelefs diftinctions of difeafes, as well as touching upon fubjects foreign from the immediate defign. Should the reader apprehend any little exceptions in this refpect, he will readily perceive the inducement; and although the accuracy of fyftem fhould fomewhat be violated, it is prefumed, it has only given way to motives of humanity and ufefulnefs.

Perfectly fenfible, however, of numerous defects, the writer relies again upon

the indulgence of the public, though he hopes that, as this edition will be found more compleat, it may be proportionably worthy of a continuance of that favourable reception wherewith the former ones have been ſo generally honoured. Particular acknowledgements, indeed, are due for the approbation of the faculty; and the like candour, it is hoped, will accept the alterations now firſt attempted to render the work appropriate to medical readers.

For the ſtile in general, indeed the author pretends to have but little to offer. Had he had more leiſure, poſſibly it might have been leſs incorrect; though it is hoped, that many of the greater imperfections which appeared in former editions are here done away.

Prompted by a laudable ambition of being uſeful in his generation, and leaving behind him ſomething beneficial to poſterity in the only way he could attempt it, he is perſuaded the benefit will not terminate here; but that others will be excited

to perfect this long neglected, but most important branch of the profession. It has, indeed, been universally lamented, that in no age has the study of the disorders of children kept pace with the advancement of science: nor have the improvements in the practice of physic in the present century, produced as full and accurate accounts of them, as of the diseases of adults. Indeed, till of later years little more has been attempted than getting rid of the wild prejudices, and anile prescriptions of the old writers, which had served only to obscure the true nature of children's diseases. In this attempt however, and particularly in meliorating the practice, some of the best of the more modern writers have run into a contrary extreme, in not a few instances.

A very principal cause of the above-mentioned neglect has arisen from an ancient idea, for a long time too generally entertained, that, as medical people can have but a very imperfect knowledge of

the complaints of infants, from the inability of children to give any account of them, it is ſafer to truſt the management of them to old women and nurſes; who at leaſt are not likely to do miſchief by violent remedies, though they may ſometimes make uſe of improper and inadequate ones.

Futile as ſuch objections moſt certainly are, they have, nevertheleſs, had conſiderable influence, and for a long time retarded a methodical inveſtigation of infantile diſorders. This defect has been noticed by ſucceſſive writers, and particularly in a treatiſe written above thirty years ſince, by Dr. ARMSTRONG. It is aptly remarked by this writer, that the ſame difficulty occurs in a variety of the moſt dangerous complaints of adults at every period of life, which confeſſedly require the greateſt aſſiſtance; ſuch are attacks of phrenzy, delirium, and ſome kinds of convulſions: to which may be added, all the diſorders of idiots and

lunatics. But theſe have been ſucceſsfully treated in every age, not excepting even lunacy itſelf, and the melancholy ſubject happily reſtored to ſociety, his family, and himſelf.

It has likewiſe been obſerved, that if infants for the reaſons above-mentioned are to be excluded the benefit of a phyſician's advice, it is difficult to ſay at what age children may ſafely be entruſted to his care; ſince at the age of five or ſix years, they would frequently miſlead the Inquirer, who ſhould truſt to their own account of their complaints. Their ideas of things are too indiſtinct to afford us ſufficient information, and they accordingly often call ſickneſs at the ſtomach, pain, and pain, ſickneſs; they will frequently make no reply to general queſtions, and when they are aſked more particularly whether they have any pain in one or another part of the body, they almoſt conſtantly anſwer in the affir-

mative; though it afterwards frequently turns out they were miſtaken.

To this idea I will venture to add, that although infants can give no account of their complaints in the manner we receive information from adults, their diſeaſes are all plainly and ſufficiently marked by the countenance, the age, the manifeſt ſymptoms, and the faithful account given by the parent, or an intelligent nurſe. This I am ſo confident of, that I never feel more at my eaſe, in preſcribing for any diſorders than thoſe of infants, and never ſucceed with more uniformity, or more agreeably to the opinion I may have adopted of the ſeat and nature of the diſeaſe. Every diſtemper may be ſaid, in ſome ſenſe, to have a language of its own, and it is the buſineſs of a phyſician to be acquainted with it; nor do thoſe of children ſpeak leſs intelligibly than thoſe of adults.*—Limited as is human knowledge

* In neither of theſe ſentiments do I ſtand alone; HARRIS, of whoſe work SYDENHAM is thought to have ſpoken

in every department, there are yet certain principles and great outlines, as well in physic as in other sciences, with which men of experience are acquainted, that will generally lead them safely between the dangerous extremes of doing too little, or too much; and will carry them successfully, where persons who want those advantages cannot venture to follow them.*—How far however, this and other assertions of the author, are made out in the subsequent tract, the writer must submit to the judgment and candour of the public.

so highly, has said the same things—" Incertæ verò diag-" noses (quæ multum obtinuit) querela non tam a sympto-" matum defectu, quàm a præposterâ ac ineptâ medendi " ratione ortum suum duxisse videtur." (page 8.) And at page 3.—Etenim asserere non verebor morbos illius ætatis " generê paucissimos esse, et gradu tantummodó differe; " imó curationem puerorum multó tutiorem ac faciliorem, " quàm virorum ac mulierum." *De Morb. Infant.*

* *Neque potest scire quomodo morbos curare conveniat, qui unde hi sint ignoret—Pertinet ad rem omnium proprietates nosse.* Celsus.

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A

TREATISE,

&c. &c. &c.

THE following account of the diseases of children, which now makes its appearance in a somewhat new form, and less exceptionable to professionable men, it is hoped may place this branch of medicine upon a respectable footing, and exhibit a practice as founded and rational as in any other. That no such serious attempt has hitherto been made, is sufficiently acknowledged; although detached parts, and some of the more important diseases of childhood, have been ably considered, at different periods.

For the manner in which the work is now executed, the author can only say, that in addition to a long experience, he has carefully consulted the most respectable authorities, as well ancient as modern; while by a close attention to facts, he has endeavoured to obviate the ef-

fects of that peculiar veil* which is said to obscure infantile disorders. A practical arrangement of them has been studied, comprehending likewise the natural consecution of parts, and the order of time in which the complaints severally appear; that some conformity may be every where observed. Regard has also been had to their respective causes and symptoms, tending to elucidate their nature, and render their treatment more obvious than has been generally imagined.

To their immediate Diseases, is added an attention to some of the principal Accidents and little Injuries to which the earlier periods of childhood are peculiarly liable; and though such articles may, indeed, be very unimportant to some readers, it is presumed they will have their use, and may, possibly, prove no small satisfaction to others. And here it may not be improper to observe, that whatever merit the publications of others may possess, it may,

* There is nothing to which this peculiar obscurity may be referred, but the incapacity of infants to describe their own feelings. There are, nevertheless, other sources of information, less fallacious sometimes than the more literal descriptions of adults, which in nervous complaints particularly, would tend to perplex the ablest physician if he should always be led by them; and the like necessary discrimination will serve him equally well in the treatment of infants.

neverthelefs, with great propriety be remarked, that they either form a part of fome large fyftematic work, or elfe, they are far too concife, and have omitted complaints of too much importance to be over-looked, as well as been neceffarily filent on many, with which the authors themfelves were unacquainted.

The judicious treatment of infantile diforders demands, indeed, equal attention and experience; clofe and repeated obfervation being the great mean of fupplying the want of that kind of affiftance which the perfonal information of adult patients frequently affords. The diforders of childhood, however, are no-wife myfterious, nor would ever have been thought fo, if they had always been fubmitted to proper hands, and been as carefully inveftigated as the difeafes of adults. Nor is it otherwife with the difeafes of the earlieft infancy, of which (as a further balance to the want of oral information,) it may be fafely afferted, that as they are more obvious than they are generally fuppofed, fo is their number comparatively fmall, their caufe uniform, and the treatment of moft of them fimple and certain.* This is efpecially

* Facillimè inquam in morbos dilabuntur infantes, et nifi aut feriùs aut imperitiùs tractentur, facillimè in fanitatem reftituuntur. HARRIS, *de morbis ætis infantum.*

true of the diſorders of this period, though it may, perhaps, be objected, that their various diſeaſes cannot all originate from one, and the *ſame* cauſe; nor is it my intention to aſſert it, though it may be ſafely advanced in regard to a great number of them. It is to be remarked likewiſe, that it is preciſely the complaints of *early infancy* that are here ſpoken of; though it is, nevertheleſs, very evident that there is a greater *uniformity* alſo in the *cauſes* of the ſeveral diſorders even of older children than there is in thoſe of adults, which have very often various, and diſſimilar remote cauſes, at different times, and in different habits: E. G. *obſtructed catamenia*, *aſcites*, *&c.*

For the proof of theſe aſſertions, as well as in order to eſtabliſh a rational practice, I ſhall firſt conſider diſtinctly the Cauſes and Diagnoſtics of their complaints, before I attempt to enter upon their cure.

And here I ſhall not attend to their various remote cauſes, but ſhall confine myſelf to a practical conſideration of the ſubject, and point out their obvious occaſions and ſymptoms. And on this account, I ſhall not take notice of all the changes which nature herſelf induces during the growth of infants, as they paſs from one ſtage of life to another; which are, doubtleſs, remote

causes of some of their complaints. A more minute attention, indeed, would lead only to diffuse and uncertain theories, which have been established in one age, only to be rejected in the next. In this country,* at least, such vague theories are now deservedly laid aside, though an era, perhaps, better calculated for their investigation, than those wherein such subjects were agitated with a zeal proportionate to the writers comparative ignorance of anatomy, and those principles of the animal economy, which can only be established by a close observance of facts.

A principal CAUSE, mentioned both by ancient and modern writers, is the great moisture and laxity of infants; which is necessary, however, in order to the extension of parts, and the rapid growth of young children. This laxity arises from the vast glandular secretion, their glands in general being much larger in proportion, than those of adults. I might instance in the thymus gland, and particularly in the pancreas and liver. But besides these, there are

* It is to be lamented, that this is not yet more universally the case elsewhere, even amongst men of letters, as appears from an anonymous latin work, on the diseases of children, published at *Amsterdam* in 1760, replete with obsolete theories, and remote causes of diseases, but possessed of less practical matter than one should have thought any work of so late a date must contain.

innumerable glands ſituate within the mouth, œſophagus, ſtomach and bowels, which are continually pouring out their contents into the firſt paſſages. This is, doubtleſs, a wiſe proviſion of nature, and I cannot, therefore, think with Dr. ARMSTRONG, that the gaſtric juice renders the chyle leſs fit for abſorption, for without a due proportion of it, no good chyle can be made; but as we do not ſtrictly follow the dictates of nature in the management of children, as to their food, manner of clothing, ſleeping, &c. this abundance of ſlimy matter may often over-load the ſtomach and bowels, the conſtant ſeat of the firſt complaints in the infant ſtate.* A ſecond cauſe ariſes from the great irritability of the nervous ſyſtem, and the delicacy of the muſcular fibres, whereby the ſerous juices do not readily enough return, but remain longer than is conſiſtent with a free circulation through the extreme parts. The quality of the milk, or other food with which infants are nouriſhed, may be accounted a third. In addition to theſe general cauſes, may be reckoned the want of ex-

* Non quod ætas per ſe ſit cauſa ullius morbi, eſt enim res naturalis et temporis determinatio, ſed quia diſponit ad morbos quoſdam facilius ſuſcipiendos, ſi cauſæ eorum acceſſerint. PRIMEROS: *de Morb. Infant.*

ercise,* which at a more advanced age, happily for us, we are obliged to make use of, and which, art, in general, does not duly supply in regard to infants.†

Hence arise acidities in the first-passages, a constant attendant upon all their early complaints.§ Among the first of which, has been

* Exercise is the grand mean of health.—The irrational species are capable of affording it to themselves almost as soon as born; and though infant children are not, they are passive, and can be *exercised*. Nature and instinct point out the expediency of it, and the fond mother who follows only her own inclination, naturally, and insensibly adopts it. On this head see the *Article* of *Motion* and *Rest*, in Vol. III.

† Together with these sources might be noticed another, not mentioned by writers, though not, indeed, an efficient cause of infantile complaints, but an occasion arising from that constitution the Creator appears to have established, as a law of nature running through the animal race; I mean, the rank which the several species hold in that scale. For, whatever their apparent comparative strength may be, the more noble and useful amongst them, whether domesticated, or wild, (though, indeed, we cannot say precisely what the latter would be in a perfect state of nature,) seem to be liable to far the greater number of evils. It is possible, indeed, some philosophers may be disposed to draw very uncharitable inferences from such a position; but there are others who conceive it to be very justifiable, and analogous to various established facts in the dispensations of providence towards lapsed creatures.

§ SYLVIUS DE LE BOE. HARRIS.

reckoned the retention of the meconium, and the laſt (which may be termed a diſeaſe at all peculiar to infants), is the cutting of the teeth, in which likewiſe the ſtate of the bowels is very much concerned.

Upon each of the above heads, it may be neceſſary to make further obſervations as occaſion may offer, in order to take notice of certain accidental cauſes ariſing from miſmanagement, or errors in the *non-naturals*, as they have been called; eſpecially in regard to the quantity of nouriſhment adminiſtered to infants, and an inattention to the ſtate of their bowels.

THE SYMPTOMS of theſe firſt diſeaſes of infants, (by which we alſo judge of their nature), are chiefly retention and excretion; ſour belchings; ſickneſs; vomitings; purgings; the nature of the matter thrown off; watching; inquietude; contraction, and ſharpneſs of the features; blueneſs about the mouth; turning up of the eyes; thirſt; heat; the manner of breathing and of crying; retraction of the lower extremities; and puſtules, or eruptions, external, or internal. The pulſe and urine are leſs certain marks, in the greater number of their complaints, than they are in older children, and adults. To theſe may be added, the openneſs, or firmneſs of the fontanelles, and of the

ſutures; the ſtrength and figure of the bones; and the relaxation or contraction of the ſkin in general, and of the ſcrotum in particular.

Having thus briefly adverted to the general cauſes and ſymptoms, I proceed to the conſideration of the Diſorders themſelves, beginning with one hitherto unnoticed by writers; which though very rare, I believe, ſeems to be the firſt that can take place after birth, and is a kind of

SYNCOPE, *or* FAINTING.

MANY new-born infants, it is well known, lie, for ſome time, in a very feeble and uncertain ſtate, with no other ſign of animation than a weak pulſation of the heart, and the arteries of the umbilical cord. But I have only in one inſtance ſeen any thing at all reſembling the true ſyncope, after the living powers have once prevailed. In this caſe, the child was born at the inſtant its mother was moving from her chair into her bed, and in conſequence, unfortunately, fell with violence on the floor. It, however, very ſoon cried, and did not appear to b materially injured; but a day or two afterward fell into a ſtrange, languid ſtate, very differen from any thing I had been accuſtomed to ſee Stools being procured, it revived, and frequent

ly took plenty of nouriſhment, but at intervals, ſunk into its former languor, breathed very faintly, and died about the ſixth day.

But, with the following caſe, which comes preciſely under the idea of *ſyncope*, I have been favoured by the ingenious Mr. HEY, ſenior Surgeon to the Infirmary at *Leeds*.

HE reports, that an infant, born at the full time, lay moaning and languid for four or five hours, and was then ſeized with a fainting fit; in which it continued for half an hour. In this ſtate Mr. HEY found it. It had ceaſed to breathe, except now and then giving a gaſp, or ſob; and was as pale as a corpſe. There was, however, a ſenſible pulſation of the heart, though feeble and ſlow; but whether the circulation had been kept up all the time previous to his viſit, could not be aſcertained.

As ſoon as Mr. HEY had time to conſider the caſe, he directed the infant's noſtrils and temples to be ſtimulated with the volatile alcali, and when it became capable of ſwallowing, a few drops of the tinctura valerian. volat. were adminiſtered in a tea-ſpoonful of water, and repeated at proper intervals: it likewiſe took a tea-ſpoonful of the ol. ricini.

The child had three other ſimilar attacks in the courſe of the day, though it had ſlept com-

poſedly between whiles, and ſucked at the breaſt. It had ſeven more fainting fits in the night, two of which were ſevere ones; but Mr. HEY was not called again till the next morning. He then obſerves, that reflecting on the caſe, and comparing it with that of a man whom he had ſeen thrown into convulſions by a large bleeding, after having hanged himſelf, which were cured by the above tincture, given in wine; Mr. HEY purſued the like plan with the child, and adminiſtered the drops in a tea-ſpoonful of a generous white-wine, every two hours. The infant was very ſenſibly refreſhed by the doſe, and had no return of the diſorder, except in the ſlighteſt degree; and became a very healthy child.

The Tinct. valer. volat. adminiſtered in this manner, is alſo an excellent remedy in other inſtances of debility and languor, when the primæ viæ have been previouſly cleanſed.

A kind of ſyncope not diſſimilar to this, but taking place a few days after birth, has been removed by a very different ſtimulant, which would not have been had recourſe to, if various other means had not failed. Infants in this ſyncope, appear to be dying for ſeveral days, and have even been concluded actually dead; but reviving again, relapſe as before. In this ſtate, the

fume of lighted tobacco has been forced into the mouth with the happieſt effect, though at the expence of a conſiderable ſtruggle ſucceeded by a ſtrong convulſion. Upon the ſpaſm ſubſiding however, the infant ſoon falls aſleep, and awakes apparently well, and continues ſo for ſeveral hours; but the ſyncope returning, the fume ſhould be repeated.

If the ſtruggle ſhould return, it will prove ſlighter than the former, and neither that, nor the convulſion will probably be renewed after a ſecond recovery.

Discolouration *of* New-born Infants.

An affection of new-born infants not much more common than the former, is a diſcolouration of the face and extremities, and ſometimes of the whole body, ſeemingly independent of the circumſtances attendant upon the birth. A mere diſcolouration of the face after laborious deliveries, is known to be very common, and gradually diſappears, without affording any occaſion of alarm. But in the preſent inſtance, the parts are very black, and afterwards turn of a leaden-blue colour; ſometimes appearing at the inſtant of the birth, and at others have not been particularly noticed for an hour or two af-

terwards. In one inſtance, I remarked the diſ-colouration of the face to be partial, appearing in ſpots; the greater number being of the ſize of ſmall peas, but ſome larger. In ſome in-ſtances, the diſcolouration abates a little, and in others not; ſometimes it goes entirely off, and returns again, and in that caſe is of more ſerious conſequence, and commonly dangerous. From an examination of the parts after death, I have learned, that this recurring blackneſs de-pends upon ſome internal malformation or de-rangement, (ſimilar, though not preciſely the ſame with one to be noticed under the head of congenite diſorders), and for which nothing that I know of can be attempted, but the general remedies for fits; by which it is uſually followed when none of the little ſubſequent means prove effectual.*

From the reſult of this recurring blackneſs, it ſeems always to be owing to ſome fixed cauſe, excited into action by certain circumſtances, particularly any ſudden agitation of body or mind. In ſuch caſes, the diſappearance of the

* In one inſtance, the ſubject of which died about the tenth day after birth, the malformation was in the ſtomach; the pylorus being preternaturally ſtrait, with difficulty per-mitting the food, (which was only breaſt-milk) to paſs into the lower bowels.

difcolouration is followed by a return of the tinge of as deep a colour as at firft. But in the innoxious kind, which is the more immediate fubject of this chapter, though the blacknefs in fome inftances, after abating a little, again returns, it never acquires the deep colour it had at firft, and when it has once compleatly difappeared, it never returns.

This difcolouration, therefore, probably depends merely on fome fpafm affecting the external veins, and interrupting the free return of the blood into the larger veffels. Where this is the fole caufe, the difcolouration, howfoever great, is, probably, harmless, and would in every cafe foon abate, and in time entirely difappear; but is removed fooner by proper remedies. The only neceffary means feem to be, to procure ftools, (which fhould be immediately folicited by clyfters); to excite vomiting if the infant appears to be fick at the ftomach; and to rub, or gently chafe the body and limbs before the fire. But nothing tends to remove the blacknefs fo fuddenly or fenfibly, as applying a leech or two upon, or near the livid parts; and fhould therefore always be had recourfe to, if the blacknefs does not very evidently abate in an hour or two after birth, by the help of one or more of the means that have been recommended.

A diſorder as common as the two foregoing ones are rare, and probably next in order of time, is

The RETENTION *of the* MECONIUM.

THE MECONIUM is that black, viſcid, or tenacious matter, which, it is well known, every infant parts with by ſtool, for the two or three firſt days after it is born, or retains it to its manifeſt injury.

The ordinary ſource of infantile complaints has already been ſaid to originate from ſomething amiſs in the firſt-paſſages, according to the moſt ancient and modern writers.* And I am ſatisfied, that a foundation is ſometimes laid for them, from not duly attending to an early expulſion of the meconium: which will ſometimes firmly adhere to the coats of the bowels, and remain for many days, unaffected even by powerful medicines, as I ſhall have occaſion to remark as I go on; ſometimes occaſioning dangerous complaints from the birth, and at others, giving riſe to more remote evils. I ſhall only obſerve in this place, that though it ſhould not be all retained, yet a part will often remain much longer than has been uſually imagined,

* HIPPOC. CELSUS, ÆGINETA. HARRIS. ARMSTRONG.

and will come away, perhaps unnoticed, at a late period, where no retention of it has been ſuſpected. Of this I can have no doubt, having been called to viſit infants after the month has been expired, who have been unwell through all that period, and from whom meconium has ſtill been coming away. A tea-ſpoonful of ol. ricini, given once or more, has ſoon carried off a great quantity; upon which all their complaints have diſappeared.

THE meconium is, probably, no longer of uſe after the child is come into the world, unleſs it be to keep the bowels from collapſing, till they can be repleniſhed with the aliment the child is ſoon afterwards to receive. Whereas, if it be not ſoon carried off, it will not only change the quality of the milk, or other food, as it deſcends into the bowels, but itſelf alſo becomes highly acrid, (the greater part of it being bile) and cannot fail to produce indigeſtion, flatulency, pain, purging or coſtiveneſs, and other ſimilar evils; and the meconium is further diſpoſed to this acrid ſtate, on another account, *viz.* from the admixture of atmoſpheric air. Whilſt the infant remains incloſed in the womb, it is ſecured from all contact of air, and therefore the alimentary contents remain harmleſs and bland, though increaſing for many months;

but it is well known how ſoon every ſecretion or extravaſation will become acrid, upon the admiſſion of air into any cavity where it may be lodged. And it is, doubtleſs, on theſe accounts, that provident nature has imparted an opening quality to the coloſtrum of all animals; a certain indication to the rational ſpecies, to aſſiſt the expulſion of this matter, now no longer required. For though a child ſhould even be ſuckled by its own mother, (in which caſe, there is, doubtleſs, leſs occaſion for other aſſiſtance) yet we know that nature doth not, in every inſtance, always fully accompliſh her own deſigns: and it is from ſome ſtriking inſtances of the truth of theſe obſervations; that I have ſaid ſo much on this ſubject, which I have alſo been the more inclined to, becauſe ſo many writers have paſſed it over almoſt in ſilence.

I am aware that all thoſe who eſteem medical people to be officious diſturbers of nature, have objected to their aſſiſtance in this inſtance, and conclude, that ſhe would do the buſineſs much better if left to herſelf. And there are even ſome phyſicians of this opinion, amongſt whom I find Dr. BUCHAN, whoſe abilities and reputation claim particular attention; though he, perhaps, may not be ſo much engaged amongſt very young infants, as thoſe whoſe peculiar province

it is to attend them from the birth. But there can be no general rule without exceptions,* and as, doubtlefs, many children would do very well without any fuch affiftance, fo have I found others who would not,† though fuckled by the parent herfelf, of which I fhall prefently give a very ftriking inftance. On the other hand, I believe, no infant can be effentially injured by conftantly affifting in this work, provided the means firft made ufe of be lenient, as they ought always to be.—It is the province of art to fuperintend nature, and not only to guard againft her exceffes, but fo to watch over her, as to enfure the accomplifhment of her intentions, whenever we perfectly comprehend, and can effect them without the rifk of doing harm. § And this intention is as rational, as the practice is fuccefsful, there being an evident acidity in the meconium, as I

* Vix ulla perpetua præcepta medicinalis ars recipit. CELSUS, *Præf. Lib.* i. *p.* 17.

† Indeed, it is now well known, that the formidable difeafe, fo fatal to new-born children in the *Weft-Indies,* called the locked-jaw, or jaw-fallen,‡ is almoft always owing either to unwholefome, and confined air, or to a want of purging off the meconium.

§ A tree will produce fruit in its wild ftate; but by human culture the tree is often preferved, and its fruit improved, far beyond the courfe of nature.

‡ See *Tetanus.*

have aſcertained by repeated experiments. The red-gum and thruſh are alſo much more rank where the ſymptoms of acidity are moſt prevalent, and on the other hand, leſs commonly take place (as I have for many years obſerved) where the meconium has been early purged off.

For this purpoſe, amongſt others, a new remedy has of late years been recommended, as preferable to any purging medicines whatever.* Mankind has ever delighted in extremes—no ſooner has any thing, formerly judged to be hurtful, or even poiſonous, been found in certain caſes, to be very uſeful, than it is ſuppoſed to be capable of doing every thing, and ſuperſedes all that the wiſdom of former ages has proved to be ſalutary. Hence, ſome advantages experienced from the uſe of vinum antimonii, in a variety of children's complaints, as far as they ariſe from one common cauſe, has induced ſome people to extol it as a univerſal remedy. But wherefore give an emetic, calculated to empty the ſtomach, in order to expel the meconium from the lower bowels?† It is univer-

* Dr. ARMSTRONG, *On the diſeaſes moſt fatal to infants.* 1767.

† On examining the firſt-paſſages of ſtill-born infants, (newly-dead) it appears, that the large inteſtines contain the true meconium; the ſmaller bowels, only a thin bilious

ſally allowed, and by this writer alſo, that emetics are not to be adminiſtered when the bowels are full, which, in this inſtance, is preciſely the caſe. It is true, vinum antimonii does not always vomit children, nor will a little matter oftentimes do this; it is ſometimes, indeed, found to act as a purgative: but if this be the intention, why not adhere to the old, and more certain method, and direct at once ſuch things whoſe proper operation may be depended upon? Not the ſtomach, but the bowels, are the natural and ſafe outlet for moſt infantile complaints, and a want of due attention to this circumſtance has been productive of ſome evils, which many practitioners, I think, are not ſufficiently aware of.

It is very evident, that ſome gentle purgative is indicated on this occaſion, and that it ſhould be of ſuch a kind as will create as little diſturbance as poſſible, and eſpecially ſhould not be of an offenſive, or indigeſtible nature; though ſuch

fluid mixed with a little gaſtric juice. The ſtomach contains ſtill leſs, as no bile can enter it but by regurgitation from the duodenum, and the gaſtric juice is in ſmall quantity, not enough to be brought up by an emetic without violent ſtraining; which I ſhould imagine it can anſwer no good end to excite by a vomit, the firſt hour a child comes into the world.

have been very commonly advifed. In general, indeed, a very little matter will fuffice; perhaps a little fyrup of rofes, diluted with fome thin gruel, and given occafionally by tea-fpoonsful, will moftly anfwer the end; will alfo ferve to keep the child quiet, and fo prevent the nurfe from giving it improper food. But if this fhould fail to procure ftools, a watery infufion of rhubarb, a tea-fpoonful of the wine, diluted as above, or a dram of caftor oil, will be found preferable to the common oils and fyrup in general ufe.*

The objection now made to oily medicines is very much increafed, from nurfes fcarcely ever giving the quantity that is directed, in the courfe of the firft twenty-four hours, as it is always defigned; and adminiftering the reft long after the child has begun to fuck, or to feed. At this period, mixing with the nourifhment, it has a direct tendency to produce indigeftion, wind, and the very complaints, which the oils adminiftered in proper time, were defigned to prevent. Not to add, that, from common oil and fyrup being the ufual purgative on this occafion, nurfes are led to procure a repetition of it, and to adminifter it whenever an infant happens to be

* See HARRIS.

coſtive during the month; and from whence the above evils may be frequently induced.

But it has been obſerved, the meconium is not always diſpoſed to come away, even by the aſſiſtance of common purgative medicines. Having, therefore, begun with ſuch as the above, if the child ſhould have no ſtool for twelve or fourteen hours after birth, and eſpecially if it ſeem to be in pain, a clyſter ought to be thrown up; which may be repeated, if neceſſary, a few hours afterwards. And here I would remark, that in the caſes where more powerful remedies are required, ſcarcely any evacuation will be procured by theſe gentler means; for, as far as I have ſeen, wherever I could procure one copious ſtool by a clyſter, or gentle laxative, the reſt of the meconium has come away with little, or no further aſſiſtance. But as it ſometimes happens, that neither clyſters nor purgatives have any ſufficient effect for ſeveral days, very powerful means muſt then be made uſe of; there being reaſon to ſuſpect a morbid ſuſpenſion of nervous influence. I ſhall cloſe this ſubject therefore, with a remarkable inſtance of this kind, (of which, I have ſeen many,) as a proof of what powerful remedies may ſometimes be required, and how neceſſary it is to pay ſome attention to this early complaint of infants.

The child was born of very healthy parents, (not at all of conſtipated habits) after a quick, and comparatively eaſy labour; and appeared to be itſelf in good health.—To avoid prolixity, I ſhall only briefly obſerve, that the child took a little rhubarb an hour or two after it was born, but having had no ſtool when I ſaw it the next day, I ordered a clyſter to be thrown up. In the evening, the child became drowſy and inſenſible, and when rouzed, it moaned, but ſeemed unable to cry. It continued pretty much in this ſtate, (except that at times it appeared to be in great pain, and was evidently convulſéd) for ſix days; and was nouriſhed chiefly by breaſt-milk, given by tea-ſpoonsful, ſeldom reviving ſufficiently to ſuck.

It had no ſtools, but ſuch as made only a few ſpots on the cloths about the ſize of a ſhilling, till the ſixth day, and then they were very ſmall, hard, and lumpy. The next day it had more of this kind, and had not till the eighth day, any thing like a proper ſtool, which was alſo mixed with hard lumps; but on the eleventh day, they were thinner, and on the thirteenth came very freely.—In the courſe of ſix and thirty hours, I preſcribed two ounces of the common infuſion of ſenna, two drams of rochelle ſalt, four grains of jalap, and a grain of ca-

lomel; beſides purging clyſters, and the uſe of the warm bath. The next day, the child took four grains of ipecacuanha at two doſes; and forty drops of vinum antimonii, at four times (in the courſe of an hour) without any effect; and at another period, ſix drams of caſtor-oil, beſides ſeveral doſes of manna.* Three days after the child had gotten rid of the meconium, the thruſh made its appearance; which was ſlight, but continued above three weeks.

From ſuch inſtances, as well as the remark already offered on the tetanus of the *Weſt-Indies*, the expediency of having recourſe to ſome ſafe and effectual means of purging off the meconium ſeems to be evidently pointed out; more eſpecially when we conſider the dangerous complaints, which are ſaid to ariſe in ſome of the hoſpitals in *Paris*, from an undue retention of this viſcid matter, as will be further noticed in another place.

ICTERITIA, *or* INFANTILE JAUNDICE.

THE Jaundice of infants ſeems always to have been improperly conceived of. Thoſe who

* See a ſimilar inſtance, in the chapter on the Croup.—The obvious cauſe of the inactivity both of emetics and purgatives, which we ſometimes meet with in infants, is, proba-

have written only on children's difeafes, have ufually paffed it over in filence, whilft others have confidered it always as rather a ferious complaint, and have prefcribed as for the jaundice of adults. On the other hand, nurfes have ufually accounted the yellownefs that appears about the third day after birth, if unufually deep, (termed by fome the yellow-gum) as the true jaundice. Certainly neither of thefe opinions is juft; for the latter of thefe appearances requires no attention at all, and though infants are not very often troubled with the true jaundice like adults, they neverthelefs are liable to flighter affections of that kind which claim fome attention. Thefe are eafily diftinguifhed from the common yellownefs, by the tunica albuginea being always very yellow; but the nails are not tinged, as in the jaundice of adults,* though it is probable they ufually would be, if the complaint were long neglected, and the child fuffered to be coftive. I have waited fome days to fee if the yellownefs would go off of itfelf, as the ufual tinge does; but it has always increafed rather than diminifhed. It arifes from vifcid

bly, the great quantity of mucus with which the firft paffages are lined, together with a deficiency of nervous influence, a frequent concomitant of fuch a ftate.

* See the *note* in page 27.

matter obſtructing the gall-ducts, and therefore requires a little emetic. The tartariſed wine of antimony is a very proper one on this occaſion, as it may likewiſe procure two or three ſtools; but as children in this complaint are not eaſily made to vomit, ſhould the wine fail, three or four grains of the powder of ipecacuanha may be given, as more certain in its operation; and the next day four or five grains of rhubarb. Should the ſymptoms continue, the emetic ought to be repeated after two or three days, and rhubarb be given about every other day, till the yellowneſs diſappears; which under this treatment, never continues more than ten or twelve days, unleſs the infant be very coſtive, or the ſtools are of a very pale colour; which is but rarely the caſe. Where an emetic has been objected to, and the whole attention confined to keeping the belly open, the yellowneſs has continued when I have taken my leave at the end of the month, attended with langour, and other ſymptoms of debility. When the belly is unuſually coſtive, and the ſtools very pale, infants are generally found to have a true jaundice, and require ſome ſaponaceous medicines, ſuch as the aqua kali, together with daily frictions of the ſtomach and belly, and the uſe of the warm-bath.

Women long afflicted with jaundice, during any part of their pregnancy, and even actually brought to bed in that ftate, do not infect their children,* unlefs they alfo fuckle them; but from fome ftriking inftances, I have found, that fuckling in that ftate is capable of communicating the true jaundice to a great degree, and that it will not be cured, but by the recovery of the fuckling mother or nurfe, or by the infant being weaned, as well as properly treated.

The true jaundice, diftinguifhed by the fkin being every where difcoloured, as well as the whites of the eyes, feems to be much more

* I have myfelf never met with fuch an inftance; but Mr. BAUMES, who has been very attentive to the difeafe, is fatisfied, that he once faw an infant fo infected from the womb: but in this cafe, the child died very foon in a very difeafed ftate, the internal part of the liver being in a ftate of fuppuration. Other inftances are given, but they are not unexceptionable. Vide, *A. N. Curious. Dec.* 1. *A.* vj. *Obf.* 241. *Dec.* iij. *A.* ij *Obf.* 40. *Fr. Delaboe Silvius, Prax. Med. Lib.* j. *Cap.* 46, *No.* xi. *p.* 302. *Theod. Kerkring, Spicil. Obf.* 57, *p.* 118. I have, indeed, lately feen an infant (the mother of which however, was not icteric) whofe finger nails were, at the birth, of a deep yellow as in any icteric adults, and very fenfibly from a tinge underneath them; but thofe of the toes were not at all difcoloured, nor had the infant any other fymptom of jaundice. It, indeed, brought up, by puking, a confiderable quantity of yellow matter, apparently bile, very foon after it was born; but the tinge of the nails difappeared the next day, and the infant throve very well.

common among new-born infants in *France*, than in this country, as appears from a memoir written by Mr. BAUMES, and to which a prize-medal of the *Faculty of Medicine* in *Paris* has been adjudged.

In that work the various caufes and nature of the difeafe are diftinguifhed; and a correfpondent treatment pointed out with great accuracy and judgment. Throughout the tract there feems alfo to be much ingenious and plaufible theory; though I cannot agree with that able phyfician, in fuppofing the jaundice to be occafioned by the retention of the meconium, otherwife than from this vifcid matter fometimes obftructing the orifice of the biliary ducts. For in the feveral inftances I have met with of the moft obftinate retention of that fecretion, there has not been the leaft difpofition to jaundice; nor can I conceive, that any part of the meconium is ufually abforbed in icteric cafes, as Mr. BAUMES has imagined; neither does fuch an incident appear to be neceffary in order to account for the frequency of the difeafe in that kingdom, or elfewhere.

As to the treatment, under the different circumftances there defcribed, I meet with nothing that militates againft the more general account I have given of this difeafe, or the

treatment adapted to it, under the form wherein it appears in this country.

There are not wanting evidences of this disease, both in the more slight and severe forms of it, being in some families hereditary; of the former, MORGAGNI has furnished a remarkable example in his own family; and of the latter, Mr. PEARSON has favoured me with a very curious one, which the reader cannot fail to be pleased with, as no such instance, I believe, is to be found upon record. I shall submit the account in his own words, and without any comment; as further experience is necessary to enable us to draw any practical inferences.

MORGAGNI'S words are, de quindecim filiis meis, cum mox a partu flavi omnes, et nonnulli etiam haud ita leviter, essent facti, cunctis per se, nullo prorsus artis auxilio, paulatim icterus solutus est. *Lib.* iii. *Epist.* 48. *art.* 60.

Mr. PEARSON'S account runs thus:

Mrs. J. had been the mother of eleven children; on nine of which the jaundice appeared a few days after they were born, and they all died within the period of a month after their birth. The tenth child lived six years, was then afflicted with the jaundice, and died. In May 1796, Mrs. J. was delivered of her eleventh child; on the third day after its birth, the skin became

yellow, and the child was at the ſame time remarkably torpid and ſleepy, and ſeemed to be ſlightly convulſed. On the following days the colour of the ſkin often varied, being ſometimes of a deeper yellow, and at other times nearly regaining its natural colour; the child continued, however, in the ſame languid and almoſt inſenſible ſtate, but received nouriſhment, and ſucked the breaſt of its mother, till within a few hours of its death, which took place on the ninth day. I opened the body of this child the day after it died, and ſhall now proceed to deſcribe the appearances exibited on diſſection.

The ſkin had nearly loſt its yellow colour; and the child did not appear at all reduced by the diſeaſe.

The liver was almoſt twice its natural ſize; the whole concave ſurface of the right lobe had a livid appearance, but this dark colour did not penetrate above a line or two; and the internal ſubſtance was ſound and healthy. The convex part of the liver, was of the natural colour and firmneſs, except on the margin of both the lobes; there the thin edge exhibited a highly injected appearance; the redneſs was however, leſs vivid and remarkable on the left lobe, than on the right. There was alſo a ſlight adheſion of the lower part of the right lobe to the peri-

tonæum. The gall bladder was nearly filled with bile of a deep yellow colour; and its ducts were permeable. The ſtomach was in a natural ſtate, and the inteſtines were without any marks of diſeaſe. In the thorax, the lungs were of a healthy appearance. The heart ſeemed to be larger than common, and the blood veſſels on its ſurface were remarkably turgid. The right auricle was diſtended with blood; and the pericardium contained about a table ſpoonful of water. Every perſon who is converſant in the diſeaſes of children, knows that new-born infants are frequently affected with the jaundice; and it is as well known, that this appearance is often of little importance; ſcarce requiring any particular medical aid, and ſometimes diſappearing ſpontaneouſly. Morgagni has furniſhed a remarkable example of this in his own family.— De quindecim filiis meis, cum mox a partu flavi omnes, et nonnulli etiam haud ita leviter, eſſent facti, cunctis per ſe, nullo prorſus artis auxilio, paulatim icterus ſolutus eſt. *Lib.* iii. *Epiſt.* 48. *Art.* 60.

Erysipelas Infantile.

In a former edition it was obſerved, that this complaint, (noticed under the term, anomalous inflammation) did not appear to have been diſ-

tinctly noticed by any preceding writer. But I have since found that HOFFMAN, though he makes no mention of any such complaint in his *Morbi Infantum*, has the following intimation in his chapter *de Febre Erysipelacea*,* and it should therefore seem, was acquainted with that species of the disease which appears in the more precise form of erysipelas; but which he had noticed only in the region of the belly.—" Umbilicalem " regionem in infantibus frequentius infestat, ac " inde per abdomen spargitur, cum gravibus " pathematibus, funesto ut plurimum eventu." The FRENCH have likewise spoken lately of a somewhat similar affection, combined with different endemic complaints infecting crouded hospitals: and it is certainly sometimes found to follow disorders of the first passages. The disease, however, not appearing to have been any where noticed in its simple and genuine form, it has seemed necessary to give a name to the disease; which, therefore, in my last edition, was termed *Erysipelas Infantile*.

IT is a very dangerous species of the spurious, or erysipelatous inflammation, which I have not often met with, but in lying-in hospitals. The ordinary time of its attack being a few days after birth, it was at the first thought never to appear

* *Sec.* i. *Cap.* 13.

later than the month; but this has been ſince. found not to be the caſe. It ſeizes the moſt robuſt, as well as delicate children, and in an inſtantaneous manner; the progreſs is rapid; the ſkin turns of a purpliſh hue; and ſoon becomes exceedingly hard.

The milder ſpecies of it often appears on the fingers and hands, or the feet and ankles, and ſometimes upon or near the joints; forming matter in a very ſhort time. The more violent kind is generally ſeated about the pubis, and extends upwards on the belly, and down the thighs and legs; though ſometimes it begins in the neck, and is equally fatal. The fact, indeed, ſeems to be, that it is always more dangerous when it ſeizes, or ſpreads to any parts of the body, than when confined to the extremities. The ſwelling is but moderate, but after becoming hard, the parts turn purple, livid, and very often ſphacelate, eſpecially in boys, when it falls on the ſcrotum; the penis ſwells, and the prepuce then puts on that kind of emphyſematous appearance, which it has when a ſtone is ſticking in the paſſage; or in the anaſarca of the ſcrotum.

Upon examining ſeveral bodies after death, the contents of the belly have frequently been found glued together, and their ſurface covered

with inflammatory exudation, exactly ſimilar to that found in women who have died of puerperal fever. In males, the tunicæ vaginales have been ſometimes filled with matter, which has evidently made its way from the cavity of the abdomen, and accounts for the appearances of the organs of generation juſt now deſcribed: in females, the labia pudendi are affected in like manner, the pus having forced a paſſage through the abdominal rings.

Various means were made uſe of at the *Britiſh Lying-in Hoſpital* without ſucceſs; though the progreſs of the inflammation ſeemed to be checked for a while by ſaturnine fomentations and poultices, applied on the very firſt appearance of the inflammation; but it ſoon ſpread, and a gangrene preſently came on, or where matter had been formed, the tender infant ſunk under the diſcharge. It is now ſeveral years ſince I propoſed making trial of the bark, to which ſometimes a little confectio aromatica has been added: from which period ſeveral have recovered. Some time after this, linen compreſſes wrung out of camphorated ſpirit, were applied in the place of the aqua lithargyri acetati, which has proved more ſucceſsful in checking the inflammation in ſeveral inſtances; nevertheleſs, the greater number of infants attacked with this

disorder, sink under its violence, and many of them in a very few days.

In a few instances, the disease has been attended with some varieties. Infants have not only come into the world with several hard, and sub-livid inflammatory patches, and ichorous vesications about the belly and thighs, but with other spots already actually in a state of mortification. A large eschar has soon spread upon the spine of the tibia, with smaller ones about other parts of the legs, and on several of the toes and fingers. In such cases particularly, the bark and cordials must be exhibited liberally, and the inflamed and mortified parts be well fomented, and dressed with warm applications.

From the good effects attending these means, particularly on a very copious use of the bark, there is further room to hope, that we may be yet more successful in the treatment of this formidable disease; which has not, however, appeared so frequently at the hospital for the last seven or eight years, as in former times.

Coryza Maligna, *or* Morbid-Snuffles.

I Have given this appellation to an uncommon discharge from the nostrils, taking place in the month, usually in the first or second week

after birth; and in one or two inftances the infant has feemed to be born with it. This difeafe has paffed under the name of the fnuffles, on account of the kind of noife fuch infants make in refpiration; but it is not only a far more fevere, but a very different complaint from the one commonly intended by that name. The difcharge is much more abundant than that arifing from taking cold, and is truly purulent from the beginning, and afterwards fanious: though in a few inftances, children affected with every other fymptom of this diforder, have no difcharge from the nofe. But under every form of the difeafe, infants always appear weakly, and as if unwell, though without any precife complaint, and are conftantly incommoded from the ftoppage of the head, efpecially in their fleep; during which they breathe with difficulty. It generally continues for feveral weeks, and upon its going off, children who have had the diforder only flightly, have become otherwife unwell, and fuch as have been brought up by hand, have been dangeroufly ill in their bowels.

The plan of treatment which I adopted in the firft inftances I met with, was to keep the body cool and open; or if the infant happened to be over-purged, or was languid, to adminifter abforbents and cordials. I recommended the

nurſe's diet to be attended to, when a child is ſuckled, and to keep a little bliſter open on its head, or on the nape of the neck; but this has ſince appeared, in ſome other inſtances to be hazardous, although no evil ever enſued where I had directed it.

I had attained no further knowledge of this complaint, when Dr. DENMAN obliged the public with a more ample and formidable detail of it; which had fallen more frequently in his way, than it had done in any other practitioner's.

His account of it is ſo accurate, that I ſhall in this edition likewiſe borrow the deſcription of its principal ſymptoms from him, adding to it, ſuch as later experience has furniſhed. He remarked, that this diſeaſe ſeemed to be new in its manner, though not in its kind, at the time of its firſt making its appearance, which was frequent in the ſummer of the year 1790; in the June of which year it was that I alſo firſt ſaw it.

After mentioning the little varieties noticed in the diſcharge, and the moſt formidable ſymptom of the diſeaſe, the difficulty of breathing through the noſe; he obſerves, that the latter was not conſtant, and that when free from it, children appeared to be in no danger; that the

difficulty of breathing was at other times ſo great as to require an attendant to watch a child ſleeping and waking, in order to open its mouth as often as it might be requiſite.

Dr. DENMAN further notices a ſingular purple ſtreak at the verge of the eye-lids; which he afterwards conſidered in a manner pathognomonic of the diſeaſe; and indeed, I have rarely met with the diſeaſe without it. He deſcribes alſo a general fulneſs about the throat and neck externally, taking place ſoon after the commencement of the complaint; which he ſeems to date from the appearance of the purulent diſcharge from the noſe: though it has been remarked, that this ſymptom although one of the moſt formidable, may be entirely wanting.

That, when theſe ſymptoms had continued for ſome days, according to the ſtrength of the patient and degree of the diſeaſe, children became pale and languid; and that upon looking into the throat, the tonſils were found tumified, and of a dark red colour, with aſh-coloured ſpecks upon them, and in ſome there were extenſive ulcerations. The parts on which bliſters had been applied in the beginning of the diſeaſe, and which had been apparently healed, often ſphacelated towards the concluſion.

The infants (he reports) gradually declined in their ſtrength, and had a particular catch in reſpiration, as if the velum pendulum palati were elongated. They were unable to ſuck, though not univerſally; ſwallowed with difficulty whatever was given in a ſpoon; and died in convulſions, or with all the marks of great debility, though not on any particular day of the diſeaſe.

Dr. DENMAN obſerves, that in the courſe of eight months he had attended eight children in this diſorder, ſix of whom died; that the body of one of them was afterwards opened by the late Mr. HUNTER and Mr. HOME, but that nothing was diſcovered, except that the membrane lining the noſe was of a dark red colour, and its blood veſſels more turgid than ordinary.

The true nature of the diſeaſe and conſequently its appropriate treatment were for a conſiderable time but imperfectly underſtood; and hence aroſe its frequent fatality. It would be ſuperfluous, therefore, to take up the reader's time with an account of the means formerly made uſe of; neither can it be neceſſary to add much to the more perfect, though haſty account, I added, to the laſt impreſſion, by way of appendix. It need only to be obſerved, that Dr. DENMAN, by a fortunate occurrence, having diſcovered the true nature of this diſeaſe,

has in confequence, happily adapted a remedy that has proved an almoft certain cure for it, if attended to in time.

The true fource then appears to be a deflux-ion and inflammation over all that extent of *Schneider's* membrane lining the antrum *Highmorianum*, pofteriour noftrils, and contiguous parts. Hence, the copious fecretion of puru-lent matter irritates the trachea, and produces that fpafm, and croaking noife, with recurring fenfe of fuffocation, fo uniformly obferved in this difeafe. By defcending into the ftomach and bowels, it diforders thefe parts; and if not very foon properly treated, induces fuch general difeafe as prefently debilitates, and at an uncer-tain, but generally an early period, carries off the little patient, in the manner that has been already defcribed. The ftools, it may be no-ticed, are oftentimes thick and pafty, and when otherwife after repeated purges, they are of a peculiar green colour, or fometimes blue, dif-ferent from what I have noticed on almoft any other occafion.

From this account of the diforder, an atten-tion to the ftate of the bowels, as I intimated in the firft inftance I had feen of it, is the mani-feft indication; but with this further light thrown upon it by Dr. DENMAN, that keeping

them very open, ſo as to prevent the lodgment of the matter falling into them, is the grand mean of cure: there being much leſs to be effected by abſorbents and ant-acids to correct the conſtant ſourneſs, and ill-condition of the ſtools, than by carrying them off ſpeedily and frequently.

To this end, one or more tea-ſpoonsful of caſtor-oil ſhould be given every day, ſo as to procure three or four motions daily. If a child ſhould be weakened by this mean, which will rarely be the caſe, ſome cordial medicine ſhould be occaſionally interpoſed; or ſhould this prove inſufficient to ſupport the infant, the purgative muſt be ſomewhat abated: but it is remarkable, that even weak infants endure purging better under this complaint than any other, unleſs it be the tooth-fever. If a convulſion fit ſhould ſupervene, as it ſometimes does, clyſters, and the uſual remedies for ſpaſm ſhould be adminiſtered, and eſpecially the cordial; which breaking off wind from the ſtomach, and giving tone to the bowels, becomes a very uſeful one in this caſe. In ſeveral inſtances, a recourſe to opium, or ſyrup of white poppies has been attended with good effect; and may in that caſe, be adminiſtered every night when the purgative has operated properly. Or a good medicine in many

cafes, is DALBY's carminative, which may be given every fix or eight hours; and particularly when repeated dofes of the laxative medicine are given through the day. From eight to twenty drops, or more, may in that cafe, be given between each dofe of the purgative.

Under fuch treatment, the morbid-fnuffles has been found to yield in the courfe of two or three weeks; fome purging medicine being continued as long as the difcharge, or difficulty of breathing fhall remain. It, however, fometimes runs on as much longer, and is attended with a fpafm in refpiration as if the infant were dying: this fymptom, as well as the fnuffling, often recurring fome time after an infant has feemed to be cured. In fuch inftances, befides purging, it has been thought ufeful to foment the bridge of the nofe, and afterwards apply fome aromatic liniment.

When the diforder is found not only to hang on for many weeks, (as it fometimes will where it has not been peculiarly violent) but together with the continued ufe of purges, to keep the infant pallid and feeble, notwithftanding the exhibition of cordial medicines; a recourfe to the decoction of oak-bark has at once removed the fnuffling, and given vigour to the child in the courfe even of a few days. A remedy that does not

ſeem to be ſufficiently known for this, and many other complaints. Indeed, where a tonic medicine is found neceſſary, but where either from a febrile diatheſis, or a diſpoſition to glandular obſtructions, the cortex peruvianus may be thought inexpedient, the oak-bark will generally be found a ſafe, and efficacious medicine.

It is neceſſary only to add, that though this diſorder had never until very lately been met with after the month, I have ſeen it at a more advanced age, in one, or more inſtances, however, it has been thought, I know not how juſtly, that ſome ſlight ſymptoms of it had, in that caſe, appeared in the month.

INWARD-FITS.

IT has been already ſaid, that any derangement of the firſt-paſſages is capable of giving riſe to various complaints, among which, that of inward-fits, has lately been taken notice of by ſome medical people, but I think ſcarcely deſerves the name of a diſeaſe. It demands attention, however, becauſe ſo much has been ſaid about it as to create apprehenſions, leſt this ſubtile diſeaſe ſhould be inſenſibly at work, and making way for more ſevere, and outward convulſions.

This complaint may take place at any period of early infancy, and is ſaid to be more dangerous the younger the infant may be. A conſtant ſymptom in this kind of fit, as it is called, is the infant's little mouth being drawn into a ſmile; which whoever has noticed muſt have beheld it with pleaſure. And if the complaint extends no further than this ſmiling, which is generally in its ſleep, it ariſes merely from a little wind, and is certainly harmleſs, becauſe in this caſe, the wind is not really confined; and therefore an immediate recourſe to emetics or purges, is more likely to do harm, by ſtraining the ſtomach, or by relaxing the bowels, than to do any good. Every body is acquainted with the effects of different degrees of irritation of the nerves, from the ſenſation produced by tickling with a feather, to that of a hard gripe, or a violent ſtroke. The firſt may be ſaid to be pleaſing; and ſuch, I doubt not, is the ſtimulus in queſtion on the nervous coat of the ſtomach of little infants, and therefore produces ſo agreeable a ſmile, that I could never conſider it any more as an indication of miſchief, than of pain. Indeed, I know of no complaint that ought to be termed inward-fits; and I mention this, becauſe nurſes are continually talking to us about them, when children are perfectly well, and

often give the fond parent needlefs diftrefs, as well as many an unpleafant medicine to the child. They are at the fame time treating the true convulfion, whilft flight, in the fame way, being led into the error by the idea of inward-fits; a term they are ever ufing, but have no precife ideas of, nor do any two of them, nor indeed, medical writers intend the fame thing, as may be feen by fo good an author as STOLL, in his late publication. It were therefore better, perhaps, the term were altogether abolifhed; as the child is either evidently convulfed, or has no kind of fit, at leaft none for which any remedy can be offered.—Infants, as well as adults, do fometimes, indeed, die fuddenly without any manifeft convulfion. But this more frequently happens after over-feeding, and arifes from a fpafm of the ftomach, (of which I fhall treat at large, in the chapter on true convulfions;) or fometimes of the heart or lungs; and infants may then be faid to die of inward-fits, there being no external convulfions. Infants are likewife carried off fuddenly from water in the head; of which I have lately feen two inftances in the fame family, (where the difeafe was afcertained by opening the cranium); both the children appearing perfectly well only a few minutes before they died: but neither of thefe occafions

are, by any means, the kind of affection ufually underftood by the term, inward-fits.—If the infant fhould fleep too long, and this fmile fhould often return, the infant may be taken up, gently tapped on the back, and its ftomach and belly be well rubbed by the fire; which is all that can be neceffary. This gentle exercife will bring a little wind from its ftomach, and the child will go to fleep again quietly.

This complaint, however, is largely treated of by fome writers, and Dr. ARMSTRONG wifhes to give a few drops of the wine of antimony; but it is very apparent, that when he confiders it as worthy of more attention than I have juft now advifed, it is either a true convulfion, in which the eyes are diftorted, and the mouth is difcompofed, inftead of putting on a fmile, or elfe he is prefcribing for another difeafe under the name of inward-fits, which former writers have treated under the head of diforders arifing from coftivenefs and wind. But if this little turn of the features fhould arife from conftant over-feeding, it were endlefs to adminifter emetics; the caufe of the complaint is obvious, and upon the removal of it the remedy muft reft.

Such has ever been my opinion of this much-talked-of complaint; and indeed, I have not to this day, after a good deal of attention to in-

fants, ſeen any thing ſufficient to induce me to alter it; or I ſhould (even in a former edition) have retracted the preceding obſervations. As I wiſh, however, to afford all the information I can on every complaint, I have to obſerve, that a gentleman of great reſpectability and experience, has conceived that though the term, inward-fits, has been often miſapplied, there is really ſuch a complaint, and that it generally proves fatal. Beſides a little blueneſs of the lips, and ſlight turning up of the eyes, often noticed by nurſes, this complaint is deſcribed as attended with a peculiar ſound of the voice, (ſomewhat like the croup) and a very quick breathing, at intervals; and is ſuppoſed to ariſe from a ſpaſm of the ſtomach, lungs, or other vital organ.—A ſpaſm I have indeed too frequently ſeen, but certainly very different from that uſually accounted inward-fits.

Theſe ſymptoms are ſaid frequently to attack the child in its ſleep; and in their commencement will go off upon taking it up from its cradle. They are likewiſe obſerved to be induced by ſucking or feeding, and to be increaſed upon any little exertion of body, or tranſient ſurpriſe, and in this manner to recur for a length of time, before they become alarming. The remedies propoſed for the cure of this complaint are an

emetic, on the firſt attack, and afterwards volatiles and fetids; but, as it has been obſerved, very ſeldom to good effect.

It was not till after ſome time, that I could from any preciſe opinion of this complaint; not having met with it during many years cloſe attention to the diſorders of children. At length, however, inſtances occurred with all the preciſe marks of the complaint, as I noted in a former edition, and accordingly offered my opinion with a becoming diffidence; ſome caſes being at that time pending. But during the laſt three years I have been further acquainted with this extraordinary ſpaſm, and have ſucceeded in removing it, in every inſtance, by treating it as I had before hinted, as a chronical croup, by adminiſtering different antiſpaſmodics; aſa fætida, ol. ſuccini, tinct. fulig. muſk, or cicuta being preſcribed as particular circumſtances have indicated: and ſo far from its generally proving fatal, I have not been able to learn by the moſt diligent inquiries, that any child ſo affected, excepting one,* has been carried off ſuddenly, or by any thing reſembling this complaint.

* This infant had very ſevere and repeated convulſion fits for ſeveral days, together with the croup, and was ſuſpected to have water in the head. It appeared, however, to be at length perfectly recovered, ſo that Dr. REYNOLDS (who at-

Since the laſt edition I have ſeen the chronical croup more frequently in children of various ages, and indiſcriminately in thoſe nouriſhed by the ſpoon, or the breaſt. I have known it attended with ſevere and repeated epileptic fits,

tended with me) and I had taken our leave for about a fortnight. The fits then returned, but were ſo ſlight that the apothecary only was ſent to; But in one, the moſt ſlight of any, the infant almoſt in an inſtant expired, very much in the manner deſcribed by the gentleman above alluded to. But as infants not unfrequently die ſuddenly of hydrocephalus,* and as that, or ſome other morbid affection of the brain had been ſuſpected, and the infant was not opened; the concluſion on either ſide is incomplete.

Should it be objected that, although this child had ſeveral true convulſion fits, at the ſame time that it was effected with the crouping noiſe, and that theſe returned after the croup had given way; yet it certainly died preciſely in the ſudden manner that infants are ſaid to do of what has been termed infant-fits; and therefore neither this child, nor others who recovered under the treatment deſcribed, had a diſorder that ought to be termed ſpaſmodic croup, but where all ill of inward fits, although only one of them died ſuddenly as ſuch infants uſually do :—Should the whole, or any part of this reaſoning be granted, (which in my opinion it ought not) yet is the term, inward-fits, equally improper, and nowiſe deſcriptive of ſo ſingular a diſeaſe as is intended by it; and can only lead to an indeterminate uſe of a term calculated rather to obſcure a dangerous diſeaſe than to lead to any good practical uſe.

* See the chapter on *Hydrocephalus.*

(and then the bowels have ufually been coftive, or the ftools very clayey); but in every inftance, the crouping has yielded, and (with the exception above-mentioned) children have continued well, treated all of them as for the chronical croup, which I ftill think to be the real complaint.

In regard to coftivenefs and wind, which have been faid to be the parent of what nurfes commonly term inward-fits, as they do not always arife from one and the fame caufe, and are productive of other complaints than thofe above mentioned, I fhall confider them by themfelves; which, it is prefumed, will be purfuing a more rational plan, than adhering to a term obfcure in itfelf, and indicative of a difeafe not well defined, and which therefore may tend to miflead the inexperienced reader.

DISORDERS *arifing from* CONSTIPATION *and* WIND.

IT has been ufual with ancient writers, when concifenefs and accuracy were not fo much confidered as in the prefent day, to treat of coftivenefs and wind as fpecific complaints; and for the reafons aforementioned, it may not be altogether improper to comply with this cuftom.

CONSTIPATION is either conftitutional, or accidental, which ought always to be diftinguifhed, the former being oftentimes harmlefs; and, indeed, children of fuch a habit of body are frequently the moft thriving. If the mother fhould be very conftipated, her children generally are fo; and fuch a difpofition, (whilft they continue in health) ought not to be forcibly counteracted, though it will be prudent carefully to watch it. And this will be efpecially neceffary, in the cafe of children who are fubject to fits; fine lufty infants being often feized with violent convulfions, without any other apparent caufe than a naturally coftive ftate of the bowels, and as uniformly recovered from the fits, merely by procuring ftools, and breaking off the wind. And this difpofition to fits has taken place long before the ordinary period of teething, and has continued till children have been a twelvemonth old; at which time the folids, and efpecially the nervous fyftem, have appeared to get ftronger. In fuch habits, a quarter of an ounce of manna, or the like quantity of the fyrup of rofes, may be put into any liquid, and as much of it given by tea-fpoonsful, as fhall open the belly. Or fhould thefe prove infufficient, a dram of ol. ricini, may be taken two or three times a week: or a few grains

of the pulv. fol. fennæ, or its extract, with, or without, a duft of grated nutmeg, or cloves: or a few drops of the tinct. aloes comp. to infants of fome months old. But it were needlefs to obferve to moft readers, that rhubarb will not be a fit purgative, though it be joined with magnefia, which will not fufficiently counteract its reftringency, howfoever proper in certain cafes; though the obfervation may be proper, that nurfes may be cautioned on this head, with whom it is fo frequent a prefcription, during the month; and whofe indifcriminate ufe of it is fometimes prejudicial. Rhubarb, or magnefia, alone, as the child is naturally coftive, or otherwife, generally anfwering all the purpofe intended, efpecially for very young infants; whilft the union makes an unneceffary addition to the bulk of the medicine, which fhould always be avoided. A few grains of magnefia in a fpoonful of dill, or common water, and fweetened with a little manna, or fyrup of rofes, forms a much neater medicine, (which may be quickened and warmed by the addition of a few drops of tincture of fenna) and in coftive habits, which ufually abound with acidity, anfwers very well in early infancy.

But if the child be otherwife in health, it has been faid, it is, in general, inadvifeable to do

much to counteract the natural habit of body.* I have formerly, even during the month, directed manna, to the dose of half an ounce at a time, to very little purpose, unless it was almost daily repeated, and have at other times given from three to five grains of jalap; till I learned, that there are some constitutions, even in infants, where the bowels cannot be kept open without a daily exhibition of some purgative medicine, and that many such children are as well left to themselves, or at least, require only to be watched. If a stool should be wanted, however, a suppository (or dry-clyster) made of a little slip of paper, or linen-cloth, twisted up, and well moistened with oil, may be very easily introduced, and will generally answer the purpose: or should this fail, a bit of Castile soap, mallow-

* I have attended in many families of numerous children, all of whom have grown up strong and healthy, but been uncommonly costive, and from their infancy have been for several days without a motion; nor would any gentle means procure it statedly. And on the day when this note was made, I was consulted for an infant of only three weeks old, who had had no stool for five days, and yet was perfectly healthy and easy. This is not mentioned, indeed, to lead practitioners to abate of their attention to a costive habit of body in infants; but in proof only of its being in some instances innoxious, and therefore no cause of alarm as long as children are otherwise perfectly well.

root, red beet, or a parſley ſtalk, may be introduced in like manner. Theſe means will be aſſiſted, and a coſtive habit relieved, by rubbing the ſtomach and bowels frequently every day with a warm hand, or piece of flannel.

Should ſuch a coſtive and windy ſtate of the bowels produce griping pains, which may generally be known by the drawing up of the legs, or of the ſcrotum, and a certain manner of crying, it will be proper to apply external warmth to the ſtomach and bowels, by means of heated bran, or camomile flowers, put into a ſoft flannel-bag; which will both tend to abate the pain, and aſſiſt the operation of the laxative. Or ſhould the coſtiveneſs be accidental, it muſt ſpeedily be remedied; and if the occaſion of it be an improper food, which is very often the caſe, the food muſt immediately be changed. If the child be not uſually coſtive, rhubarb, it has been ſaid, is often the beſt purgative, as it ſtrengthens the bowels afterwards, infants being much more ſubject to an over-purging than to almoſt any other complaint, eſpecially if brought up by hand. It ſometimes happens, however, that much more powerful medicines than rhubarb may be required, whether the child be naturally coſtive, or not; and in ſuch caſes, much caution is neceſſary: for, where a proper doſe of

ſenna-tea has proved ineffectual, it is ſurpriſing what large doſes even of rough purges have been given in vain, or ſometimes to the injury of the child. On ſuch occaſions, I would rather adviſe a recourſe to clyſters, and eſpecially thoſe made of ſuccotorine aloes. From five to twenty grains, according to the age of the infant, diſſolved in boiled milk, will rarely, if ever, fail of procuring a ſtool, and will often procure two or three, eſpecially if preceded by the exhibition of a purge. But even draſtic clyſters ſhould be adminiſtered with caution, and ought not to be very often repeated, eſpecially to very young children; though leſs hazardous, in every view, than the frequent repetition of purges of a ſimilar kind, and when uſed alternately with gentle purges, become expedient and beneficial.

Some writers, particularly the *French*, have much too frequently adviſed oil of almonds for infants of ſuch a habit. Mr. LE FEBURE DE VILLEBRUNE therefore, in a note to the tranſlation with which he has honoured my firſt edition of the diſeaſes of children, teſtifies his preference to oils; but I muſt beg leave, in turn, to differ from him, being perſuaded, there are few caſes beſide diſorders of the cheſt, in which any kind of unctuous oil, but that of caſtor, will not be injurious to young infants, and particularly if

affections of the firft paffages.—It is dubious, however, whether oil of almonds, or of olives always proves a lavative, or whether by diminifhing the natural force and action of the inteftines, it may not frequently prove the reverfe.

As there is ufually too much acidity in the firft-paffages in coftive and windy habits, a little magnefia may be given for a few days after the coftivenefs has been removed; and if the child be fuckled, the nurfe's diet muft be attended to. If any flatulency fhould ftill remain, (which will not often be the cafe, if it has arifen merely from conftipation) a little dill-water, is a very fafe and gentle carminative; or fhould one more powerful be expedient, the fluid parts of the warm opening mixture directed in the chapter on purging may be given, without fhaking up the vial. But if the flatulency be an attendant upon a lax ftate of the bowels and indigeftion, its remedy will confift in the removal of thofe complaints, which will be noticed in their place.

It may be expected, however, that a word or two more fhould be faid in regard to wind, which may likewife fometimes prove a real complaint, though it fhould not happen to be fo confined as actually to become an occafion of fits. It is ufually, inde d, but a mere fymptom of fome preceding or attending complaint; nor are its

troublesome effects either occasioned or increased by air taken in with the food, as many people have imagined; atmospheric air being essentially different from that produced by indigestion, whether owing to the weakness of the stomach, as it is called, or the improper quality or quantity of the food taken into it. It may however, in conjunction with other causes, prove a source of many complaints, and create watchfulness, startings, hiccoughs, vomitings, and even convulsions, if not timely attended to, especially if the infant be costive. A principal remedy in that case will consist in keeping the bowels open.

The only instances that I remember to have met with of wind proving of much consequence, when not preceded by other complaints, have been in very lusty new-born infants, whose mothers have also been peculiarly distressed by affections of that kind. This is, indeed, a somewhat anile way of speaking, but it states the precise fact; and one instance of an infant suffering in this way was so remarkable, that it may be worth noticing in this place.

In this case, the meconium began to pass off soon after birth, but not without repeated clysters, purgatives, and the warm-bath, and was peculiarly viscid, as well as in vast quantity. The infant, the meanwhile, appeared for several

days likely to be ſtrangled, and was black in the face, merely through the abundance of wind in the firſt-paſſages; though it was breaking off both by the mouth and the bowels, and by that peculiar, and very loud noiſe, when it came upwards, obſerved oftentimes in the hyſterical ſpaſm of adults, and continuing, with only ſhort intervals, for ſeveral hours together; ſo that the infant was ſeveral times thought to be dying. The whole face, except the noſe, became exceedingly ſwelled, ſo that the infant could ſcarcely open its eyes, though without any diſcolouration of the ſkin; being probably owing to wind diffuſed through the cellular membrane, (as hath been known to happen in the caſe of a ſmall wound of the lungs from a fractured rib;) the tumour ſubſiding immediately upon getting rid of the wind from the ſtomach and bowels.

Theſe ſymptoms, however, yielded to carminative juleps, and purging medicines, (which is all that mere windy complaints uſually require); and the infant after the meconium was all come away, was freed from every complaint, without any further ſemblance of fits, which before had been frequently apprehended.

VIGILÆ, or WATCHINGS.

WATCHING, or want of ſleep is frequently a ſymptom of the foregoing complaints, and in that caſe, may be removed by opening the belly, and afterwards adminiſtering ſome pleaſant and carminative abſorbent julep; which will then frequently act like an opiate,* by reſtoring reſt. Sometimes, indeed, this ſucceeds ſo well, when given in large doſes, that we are ſuſpected of having really given ſome narcotic medicine; which doubtleſs, would in theſe caſes prove exceedingly hurtful, as the watchfulneſs is generally a mere ſymptom, and not a diſeaſe; though when very obſtinate, it is ſometimes the harbinger of epilepſy, and then requires purgative medicines.

Watchings may ariſe from worms, purging, or gripings, whether from acrid breaſt-milk, or other food, and from indigeſtion, as well as from every thing capable of producing pain; each of which probable cauſes ſhould be very attentively inquired into before we preſcribe for the complaint, and will therefore be diſtinctly conſidered

* See HARRIS *De Morbis acutis Infantum.*

in their proper place. The uſual ſource may, indeed, be ſaid to be ſome default in the firſt-paſſages, and in very young infants is frequently owing to coſtiveneſs. I ſhall only obſerve further, if watchfulneſs be confined only to the night, it is probable the child ſleeps too long in the day-time, which may be remedied by keeping it moving, and playing with it throughout the day; of which little matters further notice will be taken in the part devoted to the *Management of Infants*.

APHTHÆ, *or the* THRUSH.

HAVING conſidered theſe lighter early complaints, I proceed to others which equally owe their origin to ſome affection of the alimentary canal, and are oftentimes of a more ſerious nature.

One of the moſt important of theſe diſorders, is the Thruſh; a complaint that, probably, depends not a little upon the different natural habit of infants, as well as upon their management, particularly in regard to food, air, and the ſtate of the bowels. This ſeems to be the caſe, inaſmuch as the thruſh is ſometimes found to ſeize every infant in certain families, in whatever way the children may be managed; as well

as to occur occaſionally in others, upon a want of proper attention to the ſtate of the alimentary canal, where a great number of other children, properly watched, have uniformly eſcaped it. Inſtances of the latter kind may have been noticed, where the mother happening to be ill, the whole attention of the family has been thereby engaged; or, where one infant has been put out to nurſe, whilſt all the reſt of the children have been carefully brought up at home.

It is amongſt the vulgar errors, however, that the thruſh is a very harmleſs complaint, or is even deſirable to a child in the month; for it is ſaid, if it does not then make its appearance, it certainly will at a more advanced age, and will then prove fatal, or at leaſt, attend the patient in his laſt illneſs. The fact is, it is a diſeaſe of debility, and therefore attacks very young, and very old ſubjects, eſpecially if otherwiſe weakened. From the above miſtake, however, the diſorder is often neglected in the beginning, whereby the acidity in the firſt-paſſages is ſuffered to increaſe, which always aggravates the complaint. It is, indeed, a much milder diſorder in this Iſland than on moſt parts of the Continent, (though, a priori, we might, perhaps, ſuppoſe it would be otherwiſe) particularly in *France*, where it reigns as a malignant epidemic,

especially in the *Hôtel Dieu*, and *Foundling Hospitals*, known by the names of Muguet and Millet.* The thrush, however, is as much a disease, as any other complaint that appears in the month, and is connected with most of the foregoing; a proper attention to which, it has been suggested, may very frequently prevent it.

This disorder is so well known, as scarcely to require any description, and generally appears first in the angles of the lips, and then on the tongue and cheeks, in the form of little white

* It has been already remarked, that several hospital diseases in *France* are more complex than with us, and possibly from their Infirmaries receiving a much greater number of patients than ours, and their apartments and beds being consequently less clean, as well as the air foul, and disposed to multiply contagion.

This is remarkably the case in regard to the diseases of infants, whose temperament is a singular union of debility and spasm, which the *French* have aptly termed *Laxité vibratile.*

The *Muguet* is a striking instance of the above mentioned tendency, it being altogether an hospital disease; which though distinguished by this name, appears to be a malignant thrush, and is frequently attended with a species of the infantile erysipelas.* When so accompanied, it is said to be constantly fatal, unless the hard and tumid parts terminate in benign abscesses, and suppurate kindly; which is rarely the case, they being more commonly found to mortify.

* See *Memoires de la Societè Royale de Médicine, anno* 1779.

ſpecks. Theſe increaſing in number and ſize, run together more or leſs, according to the degree of malignity; compoſing a thin, white cruſt, which at length lines the whole inſide of the mouth, from the lips even to the œſophagus, and is ſaid to extend into the ſtomach, and through the whole length of the inteſtines; producing alſo a redneſs about the anus. When the cruſt falls off, it is frequently ſucceeded by others of a darker colour: but this is true only in the worſt kind of thruſh, for there is a milder ſort, that is ſpread thinly over the lips and tongue, which returns a great many times, and always laſts for ſeveral weeks. I have ſeen this ſo very often the caſe, that when I obſerve a child to have the complaint very ſlightly, and that it does not increaſe after two or three days, I venture to pronounce it likely to continue a long time, but that it will be of no conſequence. Care, however, ought to be taken that the child be not expoſed to cold.—It is an old obſervation, and there is ſome foundation for it, that very long ſleeping in the courſe of the firſt week or two, is often a forerunner of this complaint.

The thruſh, in its commencement, is ſaid to be generally attended with fever; but thoſe who have been of this opinion, do not ſeem to have made what is a very neceſſary diſtinction, ſince

I have, by no means, found this to be the case where the thruſh is an original diſeaſe. When conſequent to ſevere bowel complaints, eryſipelas, and other infantile diſorders, it is, indeed, often accompanied with fever, and when ſo, proves either favourably critical, or the infant uſually ſinks very ſoon. In ordinary caſes, however, I am confident in nine out of ten, there is not the leaſt fever, though the mouth is often ſo much heated as to excoriate the nipples of the nurſe, and become ſo tender, that the child is often obſerved to ſuck with reluctance and caution. In very bad kinds of thruſh, it has been hinted, a fever may attend; but even here it does not appear at the commencement of the complaint, but rather towards the cloſe; the fever alſo being of the low kind. And this is owing to the general ill health induced by the morbid ſtate of the gaſtric juices and alimentary canal, in the ſame manner as the common hectic fever is induced by the long continuance of other bowel complaints.

ZUINGERUS,* indeed, gives an inſtance of fever accompanying this complaint; but it was in a child of four years of age, and the thruſh not the original diſeaſe. Symptoms of ſlight in-

* THEOD. ZUINGERI, Archiatri Basil. Pedójatreja Practica, 1722.

flammatory fever had preceded the thruſh, which appeared a little the next day, and both that and the fever were increaſed the day after. On the third, both were conſiderably abated, and on the fourth day the child was perfectly well.

It has long been a received opinion, that the thruſh muſt appear at the anus, and many people will not allow it to be cured if it does not, and for the like reaſon, they always ſuppoſe it to be going off when this redneſs takes place. But the truth is, that its appearance there is only a mark of the degree of the diſeaſe, or of the acidity that occaſions it, and not in the leaſt of its cure; and is not, therefore, generally to be wiſhed for. The redneſs about this part is occaſioned by the ſharpneſs of the ſecretions in the bowels, and conſequently of the ſtools, which ſlightly inflame and ſometimes excoriate the parts about the anus, and in a bad thruſh will do ſo long before the complaint is going off; but in the lighter kind, no ſuch effects are produced, or are, at leaſt, very ſlight. And, indeed, this redneſs has been ſo often mentioned to me as an indication that infants muſt, unobſerved, have already had a ſlight thruſh, or, according to others, be likely to ſuffer by it very ſoon, where children have, neverthel eſs, eſcaped it altogether; that I have ventured to imagine ſuch infants may

be leaſt of all liable to it, if otherwiſe in good health, at leaſt, my experience ſeems to ſupport that idea. And I have even conceived, that the acidity of the firſt-paſſages being in ſome children more confined, may prove a remote cauſe of ſuch infants being troubled with the thruſh; whilſt others by an open belly, and ſtronger viſcera, may eſcape it, at the expence only of this ſoreneſs of the external parts, which often continues for ſeveral days. And this has led ſome people, on the other hand, to call this ſimple redneſs, the thruſh, and we therefore often hear it ſaid, that children have had it only in this part.

A PRINCIPAL remote CAUSE of this diſeaſe, ſeems to be indigeſtion, whether occaſioned by bad milk, or other unwholeſome food, or by the weakneſs of the ſtomach.—Perhaps thick victuals, particularly if taken hot, and made very ſweet; alſo covering the face of the child when it ſleeps, or its breathing the confined air of the mother's bed, may be amongſt theſe cauſes, and ought therefore to be avoided.—The proximate cauſe,* is the thickneſs, or acrimony of the juices

* If ſuch a term, after all that GAUBIUS and later profeſſors have advanced, may be uſed in any ſenſe diſtinguiſhable from the diſeaſe itſelf, it is preſumed, that the circumſtances enumerated may be diſtinguiſhed from thoſe termed *remote* cauſes. Should this not be allowed of, the term,

ſecreted from the glands of the mouth, fauces, ſtomach, &c. producing heat and ſoreneſs in theſe parts.—A tea-ſpoonful of cold water given every morning has been thought a good prophylactic: but keeping the bowels duly open, is certainly a much better.

The means of CURE muſt be ſufficiently obvious, if due attention be paid to the nature and occaſion of the complaint. As a general obſervation, it may be ſaid, that when the thruſh attacks robuſt infants of a coſtive habit of body, it is eaſily cured, and indeed requires nothing more than keeping the bowels well open; for which purpoſe, the daily exhibition of caſtor-oil is, uſually, the fitteſt mean. But on the other hand, the complaint is attended with ſome hazard in delicate infants whoſe bowels have been previouſly weak, and eſpecially where the child is nouriſhed

proximate cauſe, ſeems to be perfectly uſeleſs, and one to which we can never affix any preciſe ideas; the *cauſe* and the *effect* being confounded.—But I do not mean to enter far into ſuch a controverſy, and have touched upon it rather by way of apology for the uſe I have made of the term, in this and other parts, and to mark an obſcurity which I leave thoſe to ſettle whoſe province it may be to take the lead in ſuch matters. It were well, however, if ſome able pathologiſt could affix ſome idea that might be univerſally adopted, ſo that when we meet with the term in different authors, no reader might be at a loſs for the meaning.

only by the ſpoon. Much has been ſaid in favour of emetics, eſpecially wine of antimony, as being almoſt a ſpecific for this diſeaſe, but I cannot ſay it has proved ſo with me,—unleſs in the ſlight caſes juſt mentioned; nor can I ſee any ſufficient cauſe for departing from the more ancient practice, in the treatment of this very common complaint.

There can be no objection, after having properly opened the bowels, to adminiſtering an emetic, and where the thruſh is of a dark colour, and the whole inſide of the cheeks is lined with it, I am perſuaded, it may be uſeful, by emptying the ſtomach of the crude juices oozing into it from the glands of this part. But, I think it would be almoſt as endleſs, as it would generally be prejudicial, to perſevere in the uſe of emetics, for days, and even weeks together, and is both a ſevere, and an unnatural method of treating a tender infant, in which the bowels are always the moſt natural outlet for its complaints; on which, therefore, nature uniformly throws the offending matter on almoſt every occaſion, as appears plainly in teething, in which the firſt-paſſages cannot be primarily affected. Should the vinum antimonii, indeed, be deemed uſeful otherwiſe than as an emetic or purgative, and by any alterative virtues capable of removing certain

morbid actions of the glands ſeated in the firſt-paſſages, a recourſe to it would certainly be rational; but I have myſelf had no ſuch evidence.

I believe, therefore, that where there is no fever, nor any uncommon ſymptom, teſtaceous powders are the beſt and ſafeſt remedy; which may be joined with a little magneſia, if the body be coſtive; or if in the other extreme, and the child is very weakly, two or three grains of the compound powder of contrayerva in its ſtead. Some ſuch preparation ſhould be adminiſtered for three or four days ſucceſſively, and afterwards ſomething more purgative, to carry down the ſcales as they fall off from the parts. For this purpoſe, rhubarb is generally the beſt; but when the thruſh is very violent, is of a dark colour, has come on very rapidly, and the child is luſty and ſtrong, a grain or two of the pulv. è ſcammon. cum calomel: * may be joined with it, agreeably to the idea of HEISTER, and the teſtaceous powders be repeated for two or three days

* A very good method of adminiſtering this powder, and other metalline preparations, is that firſt mentioned by Dr. *Armſtrong*, by directing them in the form of a pill, which may be broken into ſmall pieces, and given mixed up with the child's food; by which means, they will not precipitate, and be left at the bottom of the ſpoon, as is ſometimes the caſe when ſuch remedies are adminiſtered in powders.

as before, till the diſorder begins to give way. On the other hand, when an infant with this bad thruſh is weak and delicate, a decoction of the bark, with aromatic confection is found the beſt remedy

The choice of the teſtaceous powders, on which ſome writers have ſaid ſo much, is, I believe, of very little importance: the pureſt and ſofteſt are preferable. The deſign of theſe medicines, being to abſorb and correct the predominant acidity,* their effect will be diſcovered from the kind of ſtools that ſucceed, and the doſe may therefore be increaſed or diminiſhed, or they may be altogether diſcontinued, as circumſtances direct. In the mean time, if the child is ſuckled, the nurſe's diet ſhould be attended to, and in general, her uſual quantity of porter or ale, (which is almoſt

* The *French* phyſicians are of opinion, that the thruſh is owing to what they call a putrid alcaline humour, or ſomething analogous thereto, rather than to an acid. But this cannot be the caſe in the ordinary thruſh, as is manifeſt both from the appearance, and the ſour ſmell of the ſtools, as well as from the more certain remedies for the complaint, which are alcalis and abſorbents.†—The malignant thruſh, (already hinted at) which appears in ſome of their crouded hoſpitals, is certainly a very different complaint, and ſeems indeed, to be of a putrid nature.

† See the *Introduction* to the Third Volume, where theſe evidences are fully conſidered.

always more than ſufficient) ſhould be diminiſhed.

In regard to applications to the part, it is neceſſary to obſerve, that as they have little to do in curing the complaint, it will be improper to have recourſe to them very early. I know, indeed, it is very common to begin with them, but they ſerve only to increaſe the ſoreneſs of the parts, (eſpecially in the manner they are generally uſed) and to give a deceitful appearance of amendment. The proper intention of theſe remedies, at this period, is merely to preſerve the infant's mouth clean and comfortable, and to prevent as much as may be, any pain or injury to the wet-nurſe. If therefore the inſide of the cheeks and tongue are thickly covered with ſloughs, it may be convenient to clean the mouth two or three times a day; but it will in general be improper, till the complaint is paſt the height, the ſloughs diſpoſed to fall off, and the parts underneath inclined to heal; which never takes place till the ſecretions in the firſt-paſſages are become bland and mild. Proper applications will then have their uſe, not only by keeping the mouth clean, but by conſtricting and healing the raw, and tender apertures of the excretory veſſels.

I have, indeed, met with an inſtance of a very copious thruſh diſappearing after cleaning the mouth with borax and honey, at noon and night on the fourth day of the diſeaſe. Until this time it had been increaſing, and I expected would become worſe; and therefore directed the mouth to be cleanſed ſo early, only to render the infant comfortable, and to prevent as much as might be any inconvenience to the wet-nurſe. There was but very little appearance of thruſh, however, the next morning, and not the leaſt after that day. It is, therefore, likely, that the parts were rendered perfectly clean by the help of the borax ſomewhat ſooner than they otherwiſe would; though I can, by no means, conclude that it had any other ſhare in the cure.

The like obſervations I have had occaſion to make in regard to an exceeding ſlight appearance of thruſh, which had continued in the ſame ſtate for three days; but upon being cleared off by once uſing the borax and honey, never re-appeared. In both caſes, the uſual internal remedies were adminiſtered both before and after the recourſe to topicals.

Of the latter of theſe alſo, a variety have been in uſe, in the form of lotions and gargles, which from the earlieſt times have all been of an aſtringent nature; and it ſcarce needs be added, ſhould

be of an innoxious kind; as ſome portion of them will be ſwallowed: and I mention this becauſe STOLL reports, that the *Engliſh* adviſe a ſolution of ſacch. ſaturni, which for my own part, I never heard of before. Honey of roſes and ſpirit of vitriol, or of ſea-ſalt, as recommended by ETMULLER and Dr. SHAW, form a very good one; but nothing is preferable to borax, which ſome adviſe to be mixed up with ſugar, in the proportion of one part of the former to ſeven of the latter; a pinch of this put upon the child's tongue will be licked to all parts of the mouth. But I prefer a mixture of borax and common honey, (two ſcruples, a dram, or even more of the former, to an ounce of the latter,) which hangs about the fauces better than in the form of powder. Either of theſe may, at this period, be made uſe of as often in the day as ſhall be neceſſary to keep the parts clean, which they will effectually do, without putting the infant to pain, by being forcibly rubbed on.

It only remains to take notice of the black thruſh, as it is called, which is confeſſedly a very uncommon complaint in the infant ſtate. The late Dr. ARMSTRONG ſaid he had never met with it among the great number of children brought to his diſpenſary. I have ſeen only two inſtances of it which were in ſtrong and healthy

children; but the parts were not perfectly black, and if that be intended by the name, these cases might not be precisely that complaint: they, however, both proved fatal. After the stomach and bowels have been cleansed, I believe the decoct. cortic, and confec. aromat. as before mentioned, with the addition of tincture of snakeroot, is the most likely medicine to be of service. The bark especially should be administered very freely, and the bowels be kept open; which is more safely done by rhubarb, than any other purge.

APHTHA GANGRENOSA.

THE Aphtha Infantum hath been generally regarded as an idiopathic disease; but I believe, that every other species of the aphtha has been considered either as purely symptomatic of fever, dysentery, &c. or as a critical termination of some acute disorder. The aphthous affection, which I am now going to describe, does not, however, seem to be the consequence of any preceding general disease; and I am inclined to believe, that it is the cause, rather than the effect of those febrile symptoms which accompany what I shall call by the name of aphtha gangrenosa.

This diſeaſe moſt commonly attacks children that are above two years of age, and I believe, rarely after nine, unleſs by infection. Its firſt appearance is marked by a very ſpongy ſtate of the gums, and a remarkable tenderneſs of the inſide of the cheeks and mouth. Soon after this, little aphthous ſores, having a dark coloured ſurface, appear upon the gums, the inſide of the lips, and upon the tongue: ſometimes, ſimilar ulcers are ſeen upon the uvula and tonſils; but this is not always the caſe. As the diſeaſe proceeds, the cheeks become ſlightly tumified, and are very tender when touched; and there is often an unuſual redneſs upon that portion of the ſkin which covers the lower jaw. Beſides the aphthæ which appear upon the tongue, that part is uſually much furred, and the teeth about the edges of the gums are likewiſe covered with a blackiſh fur; the breath is very offenſive, and at this period, the diſeaſe is highly infectious, even to adults. In the progreſs of this complaint, the ſub-maxillary glands become enlarged, and ſlightly painful; and there is generally a preternatural flux of ſaliva, which is ſometimes diſcharged in conſiderable quantities from the very beginning of the attack. Sometimes the angles of the mouth are found to be

ulcerated, but this is, by no means, a common appearance.

The gangrenous thruſh is always accompanied with conſiderable languor; and ſenſe of debility; an increaſe of heat; a ſmall quick pulſe; the appetite is impaired; but the children do not ſleep ill, and they are often chearful and active, at different parts of the day.

The diſeaſe does not obſerve any exact periods; ſome children recovering in a fortnight, while others have been more or leſs affected from a month to ſix weeks.

Formidable as the appearance of this diſeaſe may be, it is not found to be dangerous, and the remedies are obvious. The Infus. cort. Caſcarillæ, warmed with HUXHAM's Tinct. cortic. Peruv. ſhould be exhibited three or four times a day, in doſes ſuited to the age; and the parts frequently waſhed with the decoct. cort. Peruv. rendered as ſharp with the acid. vitr. dilut. as children can bear it.

ERUPTIONS *on the* SKIN.

IT is, by no means, my intention to enter largely into this extenſive ſubject, but imperfectly underſtood, perhaps, even to this day, at leaſt in regard to claſſification and arrangement;

though in reſpect to children, ſufficiently plain to every practical uſe. In another part of the work I ſhall treat of the ſcall'd-head, and two or three other troubleſome affections of the ſkin, but ſhall at preſent chiefly confine myſelf to eruptions peculiar to infancy; adverting firſt of all, to ſuch as are connected with the ſtate of the firſt-paſſages. The earlieſt of theſe, is

SCROPHULUS, *or* RED-GUM.

THIS is an efflореſcence appearing uſually in ſmall ſpots, often confined to the face and neck; but at others, it extends to the hands and legs, and even the whole body, appearing in very large patches, and ſometimes raiſed above the ſurface. It will likewiſe appear in the form of ſmall puſtules, which are filled with a limpid, or ſometimes a purulent, or yellow liqour, and frequently turn dry and horny, and ſcale off; at leaſt, I have never known what name to give this kind of eruption, but that of a *rank* red-gum, as it happens only in the month, or ſoon afterwards, and never gives any trouble. There is another ſpecies as ſmall as pins heads, or even their points; firmer than the former; often of a pearl colour, and opake, which has generally been accounted a kind of red-gum; but it has

of late been ſuggeſted, might for diſtinction ſake, be termed the *white-gum.** Every ſpecies of this eruption, like the thruſh, is the effect of a predominant acid, but can ſcarcely be termed a complaint, being a kindly exertion of nature to throw off ſome acrimony; conſequently an evidence of the ſtrength of the conſtitution, as the thruſh is, uſually, of its weakneſs. In the former, nature throws off the offending matter on the ſurface more completely than in the latter, and therefore, when the eruption is ſlight, requires no aſſiſtance.

On this account it is, I apprehend, that writers have not uſually taken notice of it, though it ſhould ſeem requiſite, both on account of the various appearances of it, and eſpecially of one ſpecies more rank and extenſive than the reſt. In general, it is neceſſary only to give a little teſtaceous powder, or magneſia, according to the ſtate of the bowels, and to keep the child moderately warm; otherwiſe the raſh ſtriking in, the acrimony will fall on the firſt-paſſages, and be ſucceeded by ſickneſs, or purging, (till the eruption appears again on the

* It is to this complaint, that VOGELIUS ſeems to give the name of *achores*; but the old writers differ in this reſpect, of that complaint, however, more will be ſaid in another place, when ſpeaking of diſorders deſcribed under obſolete terms.

ſkin) or not unfrequently by the thruſh, or a ſlight return of it, if the child has lately recovered from it. In the caſe of ſickneſs at the ſtomach, or any diſpoſition to fits, upon this eruption, being repelled, ſome light cordial, ſuch as a few drops of the ſpirit. Ammoniæ comp. ſhould be given two or three times a day, and the child's feet, or perhaps the whole body, be put into warm water. The ſtate of the ſkin, and the bowels have a peculiar conſent, and on this accounts, infants whoſe firſt-paſſages have been frequently diſordered, are always benefited by eruptions on the ſkin; and in ſuch, peculiar caſe is neceſſary to guard againſt their being repelled, as well as to invite their return.

Infants are peculiarly liable to various anomalous kinds of raſh, both in the month, and till the period of teething is over. The early ones may be regarded as a ſort of red-gum, and children who are moſt ſubject to them, generally have their bowels in a better ſtate; the raſh carrying off, as has been ſaid, the acidity* with which they ſo much abound.

It may be remarked, however, that when infants at the breaſt are inclined to frequent returns of ſome eruption, if the child be always

* See HARRIS, pages 22, 23.

indiſpoſed at ſuch ſeaſons, the raſh will often be found owing to ſome ill quality in the breaſt-milk, which ought therefore to be examined, and particularly in regard to its taſte. On ſuch occaſions I have found, that milk which has been above a twelvemonth old has contracted a *very unpleaſant* flavour; and that upon changing the wet-nurſe, a very ill-looking raſh has immediately abated, and has ſoon afterwards entirely diſappeared, together with the other complaints.

One ſpecies of theſe early raſhes often takes place about the time of teething, and not unfrequently at the decline of fevers, or ſevere bowel complaints; inſomuch that, upon a ſudden appearance of it during a ſerious illneſs, I have often ventured to prognoſticate the recovery. This raſh very much reſembles the itch, both in regard to the little watery heads, and foul blotches; and is confined to no particular part of the body, though it appears more frequently about the face and neck. Indeed, I have ſeen the whole body ſo covered with it (mixed with an eruption about the face, of a different appearance, and evidently red gum) that in a conſultation, it has been by ſome taken to be the true itch. This eruption is certainly ſalutary, and even critical, requires nothing but to avoid taking cold, and is

mentioned only becauſe it is not uncommon, and has alarmed ſuch as are unacquainted with it.

But there is a very common raſh that calls for more attention, and to which medical writers have given the name of Cruſta Lactea, or Lactumen, which has a very unpleaſant appearance, but is, notwithſtanding, equally innocent with the former, and even prevents other complaints. I think I never ſaw an infant much loaded with it, but it has always been healthy, and cut its teeth remarkably well. Indeed, it falls to the lot of the fineſt children, and ſuch as are well nouriſhed; whence ſome have imagined it owing only to the richneſs of the milk.* And it is remarkable in this eruption, that howſoever thick and long continued the ſcabs may be, the cruſta lactea, never excoriates, nor leaves any ſcar on the parts. It may, poſſibly, be different in ſome other climates, though I cannot gueſs for what reaſon it ſhould be ſo on the continent: it is inſiſted upon, however, by Dr. CAROLI STACK, as well as, that children long affected with it become unhealthy. He recommends the viola tricolor. Linn. of which a handful of the freſh, or half a dram of the dried leaves, is directed to be boiled in half a pint of cows milk,

* See ASTRUC.

and ſtrained off. This quantity of the decoction is to be taken night and morning.

The cruſta lactea appears firſt on the forehead, and ſometimes on the ſcalp, often extends half-way over the face in the form of large looſe ſcabs, which as the diſorder increaſes, appear not very unlike the ſmall-pox after they are turned. It begins with white veſicles, larger than the itch, which ſoon become of a dark colour; to which ſucceed the ſcabs, with efflux of ichor, and great itching of the affected parts, ſometimes covering the head, and it is, very improperly, ſaid by ſome, the whole body. It is alſo ſaid to degenerate into the ſcall'd head;* but I have never ſeen any thing like the true tinea in young infants. It is ſometimes confounded with the cruſta ſerpiginoſa, which is a much more obſtinate complaint.

Very little, I believe, is neceſſary to be done; but in bad caſes a perpetual bliſter is ſometimes of ſervice; and, further, uſually anſwers the grand purpoſe of abating the itching, which in ſome inſtances is exceedingly great: for this end, however, the repetition of a bliſter, if needful, is preferable to keeping one conſtantly open. If the urine becomes turbid, or fetid, it is

* *Tractatus de Morbis Puerorum. Amſtolodami,* 1760. *Anonymous.*

thought the raſh will be of ſhort duration. At any rate, it uſually diſappears of itſelf when the child has cut three or four teeth, though it may ſometimes continue for ſeveral months, and in a very few inſtances, even for years: in ſuch caſes, the *Harrowgate*, or any other ſulphureous water will have a good effect; but the ſhop-medicines commonly preſcribed do nothing. I have known teſtaceous powders, calomel, and other alteratives adminiſtered to no purpoſe, as people of rank are very anxious to have it removed, if it be poſſible. This raſh will now and then make its appearance very early, and has then been miſtaken by thoſe who are not much accuſtomed to very young children, for the effect of the venereal diſeaſe. Though it has been ſaid, that it uſually dies off upon cutting ſome teeth, I have known it diſappear ſuddenly previouſly to any teeth being cut, and after ſome weeks become more violent than ever; infants remaining all the while in perfect health.

It were almoſt endleſs to enumerate the various kinds of raſh to which infants are liable, but I mean chiefly to confine my remarks to the more important, or rare ones, and ſuch as may not have been deſcribed by preceding writers. Among ſuch are the following, whoſe un-

ufual appearance is apt to perplex fuch as are not accuftomed to fee them.

The firft I fhall notice, appears chiefly in teething children, very much refembles the meafles, and has been fometimes miftaken for it. It is preceded by ficknefs at the ftomach, but is attended with very little fever; though the rafh continues very florid for three days, like the meafles, but does not dry off in the manner of that difeafe. It requires nothing more than the teftaceous powders, or fometimes the addition of a little nitre and compound powder of contrayerva; with a dofe or two of rhubarb, or other gentle laxative, on the going off of the rafh.

At this period, efpecially whilft the double or eye teeth are cutting, I have noticed a rafh which at its firft appearance is very fimilar to the above, and has likewife been miftaken for the meafles. It, however, foon fpreads into larger fpots and patches of a bright red, and afterwards of a darker hue, refembling the ill-looking petæchiæ which appear in bad fevers; but is, neverthelefs, of a benign nature. It is indeed, attended with fome fever, arifing poffibly, from the irritation occafioned by teething, and has been followed by fmall and hard round tumours, on the legs, which foftening in two or three days, always appear as if they would fuppurate, though I believe

they never do; as will be further noticed in a ſimilar appearance of boils, under the head of fever.

The treatment, like that of other raſhes at this period, is very ſimple, requiring little more than an attention to the ſtate of the bowels, or, perhaps, a few grains of the compound powder of contrayerva, unleſs the fever be conſiderable, which muſt then be treated according to the directions given under the different heads of fever, and dentition. Should the lumps ſucceeding this raſh, not begin to die away in three or four days, a decoction of the bark will be found uſeful, when the fever of dentition may not forbid a recourſe to it.

I have ſeen a third kind of raſh, in appearance reſembling the meaſles, and like it covering the whole body, but with larger intermediate patches like the eruption in the ſcarlet fever; which is mentioned more for its uncommonneſs, which might prove alarming, than for its being at all dangerous, or important. It was, however, in every inſtance, preceded by ſickneſs, by purging, pain, and a little fever; the whole ſubſiding upon the appearance of the raſh, which therefore ſeemed to be critical, or at leaſt, like ſome other eruptions, conſecutive to convaleſcence.

I have two or three times during dentition, noticed a raſh that has ſo exactly reſembled flea-bites, having even a depreſſed point in the middle of the elevated ſpot, that I could not be perſuaded by the nurſes account that it had not been occaſioned by the ſting of ſome ſuch inſect, until I had made repeated obſervations, and found it recurring uniformly a little before a tooth has been cut.

An eruption ſtill leſs frequently met with than moſt of the above, appears after children have cut all their firſt teeth. I know not what name ought to be given to this kind of eruption, which breaks out in the form of round lumps, as large as middle-ſized peas, very hard, with a very red baſe, and white at the top, as if they contained a little lymph.

They come out ſuddenly without previous ſickneſs at the ſtomach, are not ſore, diſpoſed to itch, nor ever give any trouble, and are ſeldom ſeen but on parts that are uſually uncovered, and are ſometimes there in great numbers, reſembling the diſtinct ſmall-pox; but are harder, more inflamed, and leſs purulent.

Alarming, as well as unuſual, as this appearance may be, I believe the eruption is always perfectly innoxious, if not repelled by cold, or improper treatment; and will dry away in three or four days: nothing more being neceſſary than

the little remedies, directed for the former, and to keep the child within doors, if the weather be cold.

An eruption of an appearance equally uncommon, and analogous to the above, I have met with only in children of at leaſt three or four years of age, and ſuch as have alſo been affected with ſlight ſymptoms of ſcrofula; though I have not ſeen it frequently enough to aſcertain its being, in any degree, owing to that ſpecific virus, It breaks out ſuddenly, covering at once the greater part of the body, but occaſioning neither pain nor itching; nor are children ſick at the ſtomach nor otherwiſe ill with it, though it laſts for two or three weeks.

This eruption, therefore, like ſome others, is taken notice of chiefly for its ſingular appearance, which, though ſomewhat like the nettle-raſh, is of a different figure, but may be pretty exactly conceived of by the little red lumps ſometimes left by the ſmall-pox, after they are turned, and alſo rubbed, or picked off, eſpecially after the chryſtalline or warty ſpecies, and where the puſtules have been pretty numerous.

If the firſt paſſages are at all diſturbed, my attention is principally directed to them, otherwiſe to the ſtate of the ſkin; and in this caſe, I have uſually directed ſmall doſes of the pulv. an-

timonial. to be taken for a few nights at going to bed, and the polychreſt ſalt and rhubarb, occaſionally, in the courſe of the day, with, or without, the addition of the aqua ammoniæ acetatæ.

In the courſe of a few days the eruption puts on a darker colour, is leſs prominent, and begins to ſcale off in a branny ſcurf, ſomewhat like the meaſles: but ſhould no ſuch change take place, the vinum antimonii ſhould be taken two or three times a day; to which, if no amendment ſhould ſoon be perceived, a few drops of the tinctura cantharidis may be added; a remedy often very efficacious in diſorders of the ſkin, but ſhould be adminiſtered with caution.

An eruption with every appearance of the *nettle-raſh* ſometimes occurs in children, and more generally under two years of age, and is exceedingly troubleſome to the infant, as well as matter of ſurpriſe to thoſe about it, from the ſuddenneſs of its appearance. Children going to bed perfectly well, wake very uneaſy, and frequently continue ſcreaming, for ſome time, before the cauſe is diſcovered; when upon examining the body, and the lower limbs, they are found covered with large wales, reſembling thoſe ariſing from the ſting of nettles.

The Eſſera, or Nettle-raſh, is attended, per-

haps, with the ſlighteſt of all fevers, though its acceſſion is ſometimes preceded by rigor, ſickneſs at the ſtomach, and pains in the head; eſpecially when the ſudden conſequence of expoſure to a very cold wind in athletic youths; but is never dangerous, and only where it may happen to continue a very long time can demand particular notice. The nettle-raſh of *infants* is of ſtill leſs importance; and the ſpecies now under conſideration requires leſs than any other, and, indeed, often diſappears in a few hours. When it continues longer, a few grains of the pulv. contrayervæ comp. or other of the milder abſorbent powders, with, or without a few drops of the ſpirit. ammoniæ comp. may be given two or three times a day, and the bowels kept open.

This is probably a milder ſpecies of the nettle-raſh. When the body is more covered with it, and it continues long, a little more care is required to prevent its being repelled; and if it ſhould, the tepid bath, and light cordials, as before mentioned, ſhould be had recourſe to, in order to procure its return to the ſurface; which is always of the greateſt conſequence if the child ſhould continue unwell.

In athletic youths, it has been noticed, the nettle-raſh is ſometimes attended with the uſual ſymptoms of fever; during which, the patient

ſhould be confined to the bed. It will alſo in ſome inſtances become chronical, and is then not always eaſy of cure. The following has in ſuch caſes been often found uſeful.

℞. Hydrarg. ſulphuris rubri ʒ ß Radic. Serpentar. Virg. pulv. ℈j. Syrupi ſimpl. Q. S. ut fiat bolus, bis die ſumendus; ſuperbibendo hauſt. Infuſi flor. ſambuci.

Amongſt raſhes attended with ſome little fever, there are various anomali, and one reſembling both the above, and the febris ſcarlatina, but without the marked ſymptoms of the latter, or drying off in branny ſcales in the uſual manner of that eruption. The form and colour of the raſh and degree of fever, however, are more of that kind, than of the nettle-raſh.

Another raſh, or rather eruption, takes place both in bowel complaints and in teething, reſembling the pemphylus of adults, but ſeems rather to be what the old writers have termed phlyctænæ, or phlyctides, and always appears to be beneficial. It conſiſts of veſications or bliſters, of different ſizes, reſembling little ſcalds or burns, and continues for ſeveral days. They come out in different parts, but chiefly on the belly, ribs, and thighs; and contain a ſharp lymph, which it may be prudent to let out by a puncture, with a needle, eſpecially from the

larger ones. No medicine is neceſſary but ſuch, as the particular ſtate of the bowels may call for, which uſually abound with acidity whenever there is much eruption on the ſkin.

An eruption, vulgarly termed ſcorbutic, infeſting the face and neck, and diſcharging a ſharp ichor that excoriates wherever it runs, and difficult of cure by chemical alteratives, will often yield in a ſhort time to the expreſſed juice of the ſium aquaticum. From one, to four or five table ſpoonsful may be given, mixed with one or more ſpoonsful of new milk, three times a day, according to the child's age, and the ſtate of its ſtomach; taking care, at the ſame time, to keep the bowels open by ſenna-tea, or other common laxative.

I have ſeveral times met with an eruption reſembling the pſora of the *Greeks*, or what is called amongſt us, the Grocer's-itch; whether depending at all upon the weather, it is difficult to ſay; but it is remarkable, that I have ſeen it chiefly during a cold ſeaſon, and have then uſually met with ſeveral children affected with it about the ſame time. It often begins about the arms and thighs, but always extends ſoon afterwards to other parts, and frequently ſpreads quite from the head to the feet.

It appears in ſome parts in very ſmall erup-

tions like the points of pins, with watery heads, and in other parts, as large as peas, and fometimes in foul blotches, which after breaking, form fores, and broad, ugly fcabs. Thefe die away, and the like appear, fucceffively, in other parts, fometimes for two or three months, leaving the fkin of a dirty, aduft hue. In other parts, the eruption is in the form of fmall, hardened pimples, which do not break, nor are at all fore to the touch.

This eruption appears alike in children who have cut all their firft teeth, and in infants at the breaft; though I have happened to fee it, I think, more frequently in teething children, and it then feems to be connected with dentition. And this has appeared pretty evident, becaufe, previous to my being acquainted with the remedies beft adapted to the complaint, children who had taken a variety of medicines, and continued to break out in frefh places, fuddenly got rid of the eruption altogether upon my lancing the gums, and three or four teeth in confequence coming through.

When this eruption has appeared in infants at the breaft, I have feveral times known the fuckling mother or nurfe, in a few weeks afterwards break out in like manner with the child; but whether by accident, or from contagion from

one to the other, I was for a long time unable to ascertain; but having of late found it spreading to others who have slept with the nurse or child, I have now no doubt of its being contagious, in that way; though not by a more distant intercourse.

I was for a while much puzzled with this ill-looking eruption, the long continuance of which could not fail to be very distressing to the parents, and as even caused a suspicion to rest on the wet-nurse; the eruption being sometimes suspected to be the itch, and at others venereal; which it certainly is not.

It has been always benefited for a while by washing the parts with two drams of the aqua kali puri in a pint of water; which I would always recommend, though it will not alone effect a cure. Various internal remedies also, which remove other eruptions, have generally failed in this, such as the hydrargyrus cum cretâ, and hydrargyrus cum sulphure, given in large doses; as also the sium aquaticum. The external application, however, of an ointment consisting of the unguentum sulphuris, and unguentum hydrargyri nitrati, with a greater or less proportion of the latter, has hitherto never failed me, together with the internal exhibition of one or other of the forementioned remedies.

In ſome of the more obſtinate cutaneous affections, and particularly in this, I have noticed a ſpontaneous purging taking place upon the decline of the raſh, and have always accounted it a good ſign; having never obſerved the child to be weakened by the purging, though it has ſometimes continued exceſſive for two or three weeks.

I ſhall cloſe this account with the deſcription of an eruption that is ſingular enough, reſembling very much the herpes, or broad ring-worm, or the aduſt-coloured ſpots left on the face after an attack of St. Anthony's fire. I have ſeen it in various parts, but I think only on ſuch as are more or leſs liable to be fretted by ſome part of the infant's dreſs, eſpecially on the nates and contigious parts covered by the cloths; where the blotches are always the broadeſt and moſt rank. Were it to appear no where elſe, it would ſeem to be occaſioned by ſome ſharpneſs of the urine and ſtools, as the ſkin has ſometimes a very heated appearance, though the eruption, I believe, is not at all painful. It frequently breaks out before the period of teething, but the bowels are generally ſomewhat diſordered, and the ſtools voided very green, or elſe become ſo very ſoon afterwards. This I take to be one of thoſe eruptions occaſioned by

ſome bad quality of the breaſt-milk, as, I think, I have never met with it but in young infants whoſe nurſes milk has been old, and has alſo contracted a very diſagreeable taſte. If that ſhould not be the caſe, the raſh will probably require nothing but the light abſorbent medicines before mentioned, and to guard againſt conſtipation. But if theſe means ſhould not ſucceed in a ſhort time, the nurſe ought to be changed, leſt ſome worſe conſequence ſhould enſue, as will be noticed under the head of convulſions.

In all the eruptive complaints of infants, taking cold ought to be carefully avoided, and great caution be uſed in regard to all external applications, as well as keeping the belly open. If the child is ſick at the ſtomach, a little magneſia, or teſtaceous powder, with, or without, the addition of the pulv. contrayervæ comp. may be given now and then; or ſhould the raſh be haſtily ſtruck in, and the child be ill, the remedies before mentioned ſhould be had recourſe to. The reader is reminded of this, from the great importance of attending to ſuch retroceſſion; as I have known it, in a previouſly healthy child of only ſix months old, followed not only by vomitings and purging, but by a rapid decline; and upon examining the

body after death, the lungs have been found as replete with tubercles, as I have ever ſeen them at a more advanced age. Inſtances of ſo great marks of diſeaſe have, however, occurred to me only in families inclined to ſcrofulous, or hecti-cal affections.

Should any ſcabs become very dry and hard, which the cruſta lactea, for example, will ſometimes be, eſpecially when they extend to the crown of the head, and ſeem to give pain, they may be touched with a little cream, or with oil of almonds mixed with a few drops of the aqua kali; but not a large ſurface at a time. Or ſhould they be very moiſt, and cauſe pain by ſticking to the cap, they muſt be duſted with a little common powder, or with the flos ſulphuris, and covered with a ſinged rag; but I ſhould be very cautious of doing much more with deſiccative applications, for the reaſons above mentioned, eſpecially during the time of teething.

Sore Ears.

SLIGHT bliſters and ulcerations behind the ears of infants are very common, and in general require only to be waſhed with cold water, or covered with a ſinged rag, to keep the cap from ſticking to them, and thereby giving the child

pain. They are moreover, very often beneficial, eſpecially during bowel complaints, or the eruption of the teeth; and will ſometimes get well and break out again into very foul ſores, ſeveral times, without any cauſe of alarm. But there is in ſome children of a groſs habit of body, and eſpecially about the time of teething, a ſpecies of ulcer that often requires attention, on account of its extending low down in the neck, occaſioning great pain, and ſpreading into large and deep ſores; inſomuch that a gangrene has ſometimes came on, and even the proceſſus maſtoideus become carious. Here fomentations will be neceſſary, eſpecially thoſe of bark; and its powder ſhould be adminiſtered internally. Such caſes, however, do not often occur; but whenever the ſores are large and painful, fomentations of white poppy heads boiled in milk, will be beneficial. If ſuch ulcers are very foul, the cure ſhould be begun by a bliſter on the back, in order to draw off the heated ſerum that flows to the parts. Where the bark has not been indicated, I have uſually given an opening powder of teſtacea and rhubarb, with a little nutmeg, or ſometimes nitre, to which is added either calomel, cinnabar of antimony, or hydrargyrus cum ſulphure; the latter of which, I think I have found more ſerviceable in ſome eruptive

complaints in young children, than ſeems to be imagined; but then it muſt be adminiſtered in much larger doſes than it uſually is. But above all, if this ſpecies of ulcer be not ſoon diſpoſed to heal after ſuch treatment, ſome mercurial application ſhould be made uſe of, which, though the ſores are often apparently inflamed, never offends them. A very clean and elegant preparation of this kind is the following.

℞. Calomelan. ʒj ad ʒij.
Ung. Sambuci ℥j m. ft. linimentum.

A little of this liniment ſpread on each ſide of a piece of doubled linen-cloth, and applied twice a day, will do more than all the fomentations, or healing ointments, that I have ever ſeen uſed; and indeed has always ſucceeded with me, though I have often been told, that the ſores had ſpread deeper from day to day under various other applications. From ſuch treatment I have never found the leaſt ill effects, but children have preſerved their health as well as if the ſores had kept open; which, when benign, are certainly deſigned by nature as a preſervative from other complaints, eſpecially thoſe of the ſtomach and bowels, which will preſently be noticed.

ABSCESS *within the* EAR.

IT is not uncommon to meet with fetid difcharges from the internal ear, either with, or without inflammation, and external forenefs; but this is ufually in children of one or more years old, rather than very young infants. If a little cooling phyfic, and wiping out the matter frequently, fhould not remove the complaint, deterfive injections fhould be ufed, and fome one of the warm acouftics, directed for deafnefs, be afterwards dropped into the ear. The child fhould alfo be made to lie, as much as may be, on the affected fide, that the difcharge may have a free vent.

Should the quantity and fetor of the matter be increafed, a blifter fhould be kept open on the nape of the neck, a few purges of calomel be taken, and on the intermediate days, the hydrargyrus cum fulphure. But above all, in the worft cafes, fumigations with the hydrargyrus fulphuratus ruber, and hydrargyrus cum fulphure mixed together, fhould be made ufe of morning and evening; from which I have feen the beft effects when the difcharge and fetor have been very great, and the ulcer of long ftanding.

VOMITUS, *or* VOMITING.

I Come now to the ſeveral diſorders of the alimentary canal, which have been ſaid to be ſo materially connected with eruptive complaints; and firſt, of thoſe of the ſtomach.

Vomiting is certainly not a common complaint of infants, I mean when conſidered as a *diſeaſe*, unleſs it be attendant upon ſome other, of which it is then rather a ſymptom, or the conſequence of ſuch diſeaſe improperly treated. Neither are infants in health diſpoſed to vomit frequently, unleſs the ſtomach is overloaded; the milk is then uſually ejected as ſoon as it is taken, and comes up unchanged. Nor is this to be conſidered as a diſeaſe, or as calling for the diſcipline recommended by ſome writers. Wherefore ſhould the reſidue of the aliment be forced off the ſtomach by an emetic, when nature has already parted with all the oppreſſive abundance? This ſpontaneous puking is not attended with any violence to the ſtomach; the milk, or other food ſeems to come up without any ſenſible action of the part, or the child being ſick. Nay, it is at once ſo common to ſome of the fineſt children, that it is a ſaying with ſome experienced nurſes, that a puking

child is a thriving child; and when ſuch ejection comes only ſoon after ſucking or feeding, and the aliment is caſt up ſcarcely changed, matter of fact verifies the obſervation.* I have even known clotted blood thrown up, without any apparent effort, in an infant not two days old, and without the leaſt ill effect.—But if the food remains ſome time on the ſtomach, it will then be thrown up in a curdled ſtate, which is an indication to attend to it, if it happens frequently. Not that the milk ought not to curdle on the ſtomach, which it always muſt, in order to a due ſeparation of its component parts, and is the chief, if not the only digeſtion, it undergoes in the ſtomach. The whey and the rich oil are there ſeparated from the curdy and earthy particles, the former being taken up by the lacteals,† is converted into blood; whilſt the bulk of the latter is carried down and expelled with the other excrementitious parts of the food, and

* See PRIMEROS; *De Morbis Infant.*

† It is not intended in this place to ſpeak with phyſiological accuracy, but in a mere referrence to the firſt digeſtion: in the ſecond, indeed, it is probable, that ſome portion of every conſtituent part of our food may be further prepared to become nutritious; the thinner ſerving to renew the finer parts of our ſyſtem, and the groſſer, ſuch as the earthy particles, &c. more adapted to the renovation of the muſcles, tendons, bones, &c. may be depoſited in theſe parts.

gaſtric juices, for which nature has no longer any uſe. This curdling of the milk, therefore, is the natural courſe of digeſtion, though many writers have not been ſufficiently attentive to it, and HARRIS has aſſerted, that it is owing to a predominant acid; implying, that an undue acid is the only cauſe of the ſeparation; which it certainly is not. It may, indeed, occaſion it to take place too ſuddenly, and give riſe to various ill conſequences: although ſuch ſeparation ought to be made, as the natural and proper effect of mixing duly with the gaſtric juice. When infants, therefore, not over-fed, throw up the milk uncurdled, after it has been ſome time in the ſtomach, it is always, a worſe ſign. But when the milk comes up in a curdled ſtate, it proves that the ſtomach having digeſted what it has received, hath not power to puſh it forward into the bowels, and therefore throws up a part of it.* If this be the caſe, the ſtomach may perhaps require to be emptied of its whole contents, which may then be eaſily done, by giving a little warm water, or chamomile tea. The cauſe of the indigeſtion was an accidental repletion; that removed, together with the conſe-

* I have known a child throw up a piece of curd full as large as the thumb of a grown perſon, and as firm asa piece of dough; and be perfectly well the next minute.

quent foulneſs, or bad juices of the ſtomach, the effect alſo will generally ceaſe, and unleſs the vomiting returns, from any further injury the repletion may have occaſioned, it requires nothing more. To diſtreſs the child, on every ſuch occaſion, with a ſickening emetic, or drench it with rhubarb and magneſia, is as needleſs as it would be to wake a patient out of a ſound ſleep to give him an opiate. Only let the child faſt a little after having emptied the ſtomach of its load, and the nurſe be careful not to overfil it for the future, and it will rarely want any other aſſiſtance.

If the vomiting, on the other hand, has ariſen from acrid diet, a little further diſcipline may be requiſite, becauſe ſome half digeſted food has got into the bowels, perhaps for ſeveral days together. In this caſe, a gentle laxative, and change of food for one of a milder kind, is all that is generally neceſſary; or if there be a prevailing acidity in the ſtomach, either the teſtaceous powders, or magneſia, (according to the ſtate of the bowels) may be mixed with the food, or be otherwiſe adminiſtered for two or three days, as the occaſion may require. Or a drop or two of the aqua kali, or a little caſtile, or almond ſoap, are excellent remedies, eſpecially when the ſtools are unuſually green, or clayey; not only as they

will tend to correct acidity,* but promote the ſecretion of bile, as well as a generous warmth in the firſt paſſages, and aſſiſt the digeſtion. For which purpoſes alſo, myrrhe, though an obſolete, is an excellent remedy, when infants are a few months old. Should the vomiting be a ſymptom attending ſome other diſeaſe, its remedy will turn on the proper treatment of its cauſe. Should it follow upon a ſuppreſſion of diſcharge behind the ears, and more eſpecially if conſequent upon the uſe of drying applications, a return of the diſcharge ſhould be ſolicited. Or if the cauſe be the ſudden diſappearance of ſome eruption on the ſkin, its appropriate remedies muſt be employed; and the infant be put to bed: and if the vomiting continues, an emetic ſhould be given, and afterwards a bliſter, or warm plaiſter, applied to the pit of the ſtomach; or ſome light cordial be adminiſtered.

Dr. A. HOME† ſtrongly recommends the following,

* It is well known how ſmall a quantity of ſoap put into a churn will prevent a due ſeparation of the component parts of the milk, ſo as to allow very little, or no butter to be made; whereas, a little vinegar effects the ſeparation almoſt inſtantaneouſly, and ſaves a vaſt deal of trouble.

† On the Diſeaſes of Children, 1776. Though this work has been ſo long publiſhed, I did not happen to ſee it until

℞. Decoct. Cort. Peruv. ℥ij.
Syrupi Papaver. alb. ʒij.
Ft. Miſtura, cujus ſumatur Cochleare minimum, vel Infantum ſecundâ quaq. horâ.

Having mentioned emetics, I ſhall take this occaſion to obſerve, that the choice of them will be always beſt determined by the nature of the complaints for which they are adminiſtered. In thoſe of the firſt paſſages, ipecacuanha is generally the beſt; but if a fever ſhould attend, or it be wiſhed to promote a gentle perſpiration, thoſe of antimony are preferable; or laſtly, in diſorders of the breaſt, the oxymel, conſerve, or tincture of ſquills.

But a more troubleſome vomiting will ſometimes ariſe in unhealthy children, from too great a ſenſibility, or too great an irritability of the nerves of the ſtomach. Such medicines are then indicated as will brace, or ſtrengthen that organ, and abate its ſenſibility. For the former, a cold infuſion of the bark, or of chamomile flowers,

my laſt Edition was in the preſs. It contains many remarks that do the author great credit, conſidering the time in which it was written; but it is very deficient in diſcriminating the ages of children, and the adjuſting the doſe proper for them, even where mercury and opium enter into the compoſition; a neglect of the greater importance as he writes profeſſedly for female readers.

with orange peel and ginger, and ſometimes a little rhubarb: for the latter, a ſaline mixture with a drop or two of laudanum. And the benefit of theſe may be increaſed by aromatic and ſpirituous fomentations to the pit of the ſtomach, or by the labdanum plaiſter, with a little theriaca added to it. Alſo the following,

℞. Gum maſtic. elect.
Stor. calamin.
Pulv. Nuc. Fr. Myriſticæ
Fol. Myrti
Flor Balauſt. āā ʒj,
Ceræ atque Tereb. āā Q. S. ut ft. Emplaſtrum, alutæ inducendum.

℞. Ung. ſimpl. ʒiij.
Olei Macis (dict.)
—— Roriſmarini āā ℈ ß.
Balſ. Peruv. ℈ij.

M. F. Unguent. quo tot quotidiè Regio Stomachi atque Umbilici calidè inungatur, ſupraponendo ulterius morſum lanulæ.

Laſtly, a vomiting may ariſe from a ſtrangulated hernia. When therefore, ſcarcely any thing is found to ſtay on the ſtomach, or all the above remedies fail to remove a frequent diſpoſition to vomit, practitioners will be aware of it, and make a due examination of the ſeveral parts where ruptures appear.

CARDIALGIA, *or* INFLAMMATION *of the* STOMACH.

THIS is a diſeaſe very ſeldom met with, I believe, in this country, but is common in *France*, as appears by a paper read before the *Royal Society* of *Medicine*, in *Paris*, by Mr. SAILLANT; and is ſaid to attack children of four or five years of age.

The pathognomonic ſymptoms of this diſeaſe are, great pain in the region of the ſtomach, ſometimes recurring every quarter of an hour; violent contortions of the child; and the application of a hand to the ſeat of the diſeaſe. Mr. SAILLANT in the firſt inſtance ſuſpected theſe ſymptoms to be owing to worms, and preſcribed accordingly; but that child dying in a few days, the body was afterwards opened, and the preſence of genuine inflammation of the ſtomach, and of a part of the inteſtinal canal was clearly demonſtrated.

The treatment of this dreadful diſeaſe is, however, repreſented as very ſimple, conſiſting only in cooling and laxative remedies, which when adminiſtered in good time, are ſaid to be uſually ſucceſsful. For this purpoſe, Mr. SAILLANT has generally adminiſtered the juice of

lettuce, by ſpoonsful, every hour; an idea he took up from BAGLIVI, who directed the juice of the ſow-thiſtle in the hemitritus, under ſymptoms analogous to thoſe of the cardialgia. The juice of lettuce was generally found to relieve the pains in a ſhort time, and ſome infants who had been judged to be in a hopeleſs ſtate, and even at the point of death, were perfectly recovered.

Mr. *Andrij* has done me the kindneſs of acquainting me, that he has ſometimes met with this complaint in the *hoſpice des infans trouvès*, eſpecially during the ſummer, and at ſuch other times as infants have been obliged to continue there without the breaſt, for the want of wet-nurſes, (who are uſually otherwiſe engaged in the harveſt and vintage ſeaſons;) as well as during a hard froſt. In the inſtances Mr. *Andrij* has ſeen, the infants were found to vomit up every thing that was given them; which it is probable, muſt generally be the caſe where the ſtomach is actually inflamed. In ſuch inſtances, perhaps, fomentations, or a bliſter, to the ſtomach, and the uſe of a warm-bath, together with caſtor-oil, or other demulcent laxative, ought alſo to be made trial of.

TORMINA, *or* GRIPES.

THE Gripes is a very common term amongſt nurſes, and ſome writers on children's diſeaſes have treated of it under a diſtinct head; but this ſerves to perplex matters, inſtead of explaining them. If a child be not hungry, nor hurt by ſome parts of its dreſs, there will always be ſymptoms attending to account for its crying, and other expreſſions of pain. The cauſe is, indeed, very commonly in the bowels, and may be increaſed by coſtiveneſs and wind, which have already been treated of, but more commonly manifeſts itſelf by a purging, which comes next in order to be conſidered. I ſhall only previouſly obſerve, that children when very much griped, ſometimes refuſe taking the breaſt, though offered them repeatedly, when placed, in the uſual manner, on the nurſe's arm, but will take it, nevertheleſs, very readily if they are held, upright, before her.—The reaſon of this, perhaps, is, that the offenſive and irritating matters in the ſtomach then deſcend from the cardia, which is exceedingly ſenſible from its numerous nerves.

DIARRHŒA.

UNDER the article of vomiting it was obſerved, that frequent puking is oftentimes an at-

tendant upon ſome other complaint, and then demands a peculiar attention, and is to be treated agreeably to the nature of ſuch complaints; and there is perhaps, none which it more frequently accompanies than a diarrhœa.

Vomiting and purging very often ariſe from unwholeſome milk or other food, and from a moiſt cold air, as well as from the ſudden diſappearance of ſome eruption on the ſkin. The purging is not then haſtily to be ſtopped, nor even abſorbent powders to be given, till the offenſive matter be firſt carried off; and if a vomiting attend, the cure ſhould begin by adminiſtering an emetic. But though the purging ought not to be checked without previous evacuations, nor to be ſtopped haſtily, yet it is not to be treated with a daily exhibition of rhubarb, which, though a common practice with many, ſerves to prolong a purging after the cauſe has been removed, by keeping up a continued ſtimulus. The diarrhœa, indeed, is a complaint often as difficult to treat as any in the infant ſtate, and is therefore worthy of particular notice. In a general way it may be ſaid, that a ſufficient doſe or two of rhubarb ſhould be adminiſtered in the beginning, and afterwards abſorbents. If the purging ſhould ſtill continue, an emetic will ſtill be neceſſary, as purges do not

always lie long enough in the ſtomach to carry off the offenſive matter it contains After this, it is often neceſſary, that the child be purged again; for it ſhould always be remembered, that many complaints of infants, whether ſeated only in the firſt-paſſages, or attended with fever, will frequently ſeem to be giving way upon procuring ſtools freely, but will ſoon return if the ſame means be not repeated, till the whole irritating matter be carried down. Should ſuch repetition fail of ſucceſs, though the diet has been carefully attended to, the uſe of them at preſent ſhould be laid aſide, and recourſe be again had to abſorbents, and if there be no fever, to light cordials, and even to opiates; without the latter of which, many bowel complaints will not admit of a laſting cure, owing to the great irritability of infants. Such medicines are not, indeed, very often required till children are ſome months old: but when they are found neceſſary, not only may ſyrup of white poppies, but even laudanum be given with the moſt perfect ſafety; though from the time of GALEN, (who cautions againſt giving theriaca to children) till of later years, many phyſicians have been fearful of directing them, (arguing from their abuſe againſt their uſe) and eſpecially HARRIS, who in other reſpects, has written ſo well on their diſeaſes. I

remember being called to ſee an infant of only two days old, who, through a miſtake, had taken ſome hours before, four drops of laudanum. The parents were greatly alarmed at the child's lying in a comatoſe ſtate, without being able to take the breaſt or open its eyes. I adviſed therefore only to get a little breaſt-milk down with a tea-ſpoon, and encouraged them to believe that the laudanum would do no kind of harm; the infant having no diſorder for which that medicine was improper. Accordingly, though the child lay ſleeping above ſix and thirty hours, it afterwards awoke perfectly well.—This is mentioned, however, only by way of encouragement to ſuch as may be fearful of adminiſtering opiates even where they are neceſſary. They are, nevertheleſs, very powerful medicines, and ſhould be preſcribed with due caution for patients of every age, and eſpecially for infants. A like caution may be neceſſary in regard to cordials, which are, nevertheleſs, in many caſes equally proper, notwithſtanding a modern prejudice againſt them. There is a certain coldneſs and languor in infants when they are ill, eſpecially under ſome bowel complaints; and whenever they may be in that ſtate, that claſs of medicines will have a very happy effect.

It is to be obſerved, however, that a purging is not always a diſeaſe. The bowels are the great natural, and critical outlet in infants, as the pores of the ſkin, and the kidneys are in adults; although in both, from their vaſt extent of ſurface, they ſpread a very broad mark for the ſhafts of diſeaſe. Not the mere diſcharge, therefore, but the cauſe of it is, in the firſt inſtance, to be removed, and the ill effects are to be guarded againſt by keeping the purging within bounds. For this purpoſe, the chalk julep, as it is an aſtringent only by abſorbing the acrid, or changing the acid, and irritating matter, is as ſafe as it is uſeful; becomes an excellent anodyne, and after the bowels have been well cleanſed, will uſually accompliſh the cure.

Dr. ARMSTRONG takes occaſion to ſpeak againſt the uſe of abſorbent powders, and prefers wine of antimony, from a ſuſpicion he has entertained of the great dependance that modern writers appear to have placed in them, previous to the exhibition of purges, on account of their known property of correcting acidity; and ſays, that in caſes of extreme danger, a phyſician who is called in late, would, according to this practice, often find no opportunity for purging at all. But ſurely this is ſcarcely an argument to prove the ſuperiority of his method, ſince no writer

that I know of, ever deſigned it as a rule without exception; and HARRIS, who has ſaid as much as any man in commendation of the abſorbent powders, does not deny the expediency of ſometimes beginning with purgative medicines. But had it been otherwiſe, the argument goes no further than to prove, that in caſes of great danger, the wine of antimony, being both an emetic and a purge, ought to precede the uſe of the teſtaceous powders. Inſtead of this, Dr. ARMSTRONG ſlides into a general concluſion from premiſes evidently limited; though he has advanced nothing againſt an eſtabliſhed, and ſucceſsful method of treatment. And I may add, that whilſt he is fearful, that the abſorbent powders (which nobody preſcribes without ſome purging medicines,) ſhould check the looſeneſs, and thereby increaſe the fever; he ventures, after a repetition of the antimony, to adminiſter what he calls a gentle paregoric, or opiate, to appeaſe the pain, conſiſting of a dram of ſyrup of white poppies, repeated every three or four hours, till that end be obtained. So that if the pain ſhould continue for nine hours, a child will take half an ounce of the ſyrup; and this Dr. ARMSTRONG obſerves is the only medicine he gives, except wine of antimony, which (notwithſtanding the opiate) he ſuppoſes to be the efficient remedy—

but how much more powerful a reſtringent, in its ultimate effect, the ſyrup is, than the abſorbent powders, it is unneceſſary to ſay.

It is an improper exhibition of abſorbents, I apprehend, rather than their doſe, that has made ſome practitioners ſo averſe to them; for they certainly ought, in many caſes, to be given in large quantities: but if adminiſtered too early, and long continued, the ſtools may become like plaſter of Paris, and be with difficulty excreted. Such an inſtance is mentioned by BOERHAAVE, who had, nevertheleſs, a very favourable opinion of them, as will be noticed hereafter. There is, however, ſome fallacy in regard to the colour of the ſtools; as this kind is obſerved on different occaſions, in children who have never taken any of the teſtacea, if the ſecretion of the bile be obſtructed; (as in jaundiced adults,) and will be noticed in its place.

In his ſecond edition, Dr. ARMSTRONG mentions another method he has fallen upon for curing this diſorder, which, however, appears to be recurring to the ancient method of treating bowel complaints; and ſeems, indeed, to overturn the idea he had entertained of the ſuperiority of wine of antimony over every other medicine. This method, he tells us, is by cleanſing the bowels, by means of proper pur-

gatives, joined with anodynes, intermixed in ſuch a manner as to correct the griping quality of the medicines, and leſſen the ſtimulus occaſioned by the acrimony of the ſtools.—A plan worthy of imitation, it is apprehended, and though not likely to be proper in all caſes, muſt, as an occaſional practice, be ſafe and beneficial.

Regard is to be paid to the kind of ſtools that come away, which are ſeldom healthy and natural, and are uſually diſtinguiſhed into the ſour and curdled, ſlimy, mucous, green, pale, clayey, watery, and bloody;* ſome of which are at times alſo fetid. Under ſome of theſe, and particularly the latter, ſome powerful purgative, ſuch as ſenna-tea, is generally neceſſary, if the child is not very young. True bloody ſtools, indeed, are leſs common in infants than adults, and ſeldom occur but in the laſt ſtage of the diſeaſe; but a few ſtreaks of blood may ſometimes be mixed with the feces, which ariſing only from the hemorrhoidal veins is of no conſequence. Watery ſtools will be conſidered apart, under the head of the true watery gripes: at preſent I ſhall only obſerve, that very threatning appear-

* On feces diſcoloured by blood, or otherwiſe blackiſh, particular notice will be taken, under the head of Fever, and in *Vol.* iii. where mention is made of ſore nipples.

ances of that affection, when green and curdled matters are purging off, are ſometimes happily removed, in a day or two, by a gentle emetic and ſuch a warm purge as that noticed below. When the ſtools appear very ſlimy, and more eſpecially the ſour, or curdled, or when the child is much diſpoſed to hiccough, the magneſia, and other abſorbent powers are calculated to afford peculiar aſſiſtance, and may be warmed by any ſuitable aromatic. When the ſtools are very green, or white and clayey, a drop or two of the aqua kali may be occaſionally put into the other medicines, or a little ſoap be diſſolved in the clyſters, which are eſſentially neceſſary when much griping attends this complaint; ſome light cordial is alſo frequently uſeful, and the child's belly may be rubbed with a little warm brandy; or be fomented with a decoction of chamomile flowers, or white poppy heads. But if the tormina be great, clyſters of the whey of cows or aſſes milk, as adviſed by HOFFMAN, will often be found very uſeful, and ſhould the infant be much emaciated, a portion of the ſugar of milk* ſhould be added to them.

It may be obſerved in this place, as a pretty

* The ſugar of milk may be procured by only evaporating the whey by ſlow boiling; but may be made more pure by firſt clarifying it by the white of eggs.

general indication, that purgatives for infants ought to be made potentially warm, by the addition of a little ginger, pounded cardamom-ſeed, carraway-tea, or dill-water; which is of more conſequence than is uſually apprehended. I have indeed, known a careful attention to this circumſtance alone, happily ſuppreſs complaints in the bowels, which had long continued obſtinate, though, in other reſpects, properly treated. On this account, I venture to recommend the following as an excellent general remedy, eſpecially as infants are pleaſed with it, and it will keep for a great length of time.

℞. Pulv. Rhei gr. xv.
Magnes. albæ ʒ ß
Aq. Fæniculi
Anæthi āā ℥vj.
Syrupi Roſæ ℥ ß
Spir. Ammoniæ comp. gtt. xv. ft. miſtura, cujus ſumantur Cochl. ij vel iij minima, bis, terve in die, vel ut opus ſit. Or,

℞. Pulv. Rhei
Nucis myriſt.
Magnes. albæ āā gr. iij vel iv. Sit pro pulvere, deglutiendo è cochleare minimo ſyrupi Roſæ.

Should purgings return frequently, it will be very uſeful (eſpecially in the time of teething,

or upon the ſtriking in of ſome eruption on the ſkin), to procure a little diſcharge behind the ears, or to apply a burgundy-pitch plaſter to the back. For the former purpoſe, ſome finely pounded Spaniſh flies may be rubbed on the part, till a ſlight excoriation, or rawneſs, is produced; or perhaps a better method, is to draw a piece of coarſe doubled worſted, or a bit of narrow tape, through a piece of the emplaſt. cantharidis, and lay it cloſe behind the ears where they riſe from the head, and repeating it occaſionally; which will produce a diſcharge exactly from the ſpot where it is wont naturally to ariſe. The following preparation is highly extolled by BOERHAAVE,* as an almoſt univerſal medicine in the diſeaſes of infants; and is certainly a good remedy, eſpecially in their bowel complaints, and particularly when attended with green ſtools, after the exhibition of proper opening medicines.

℞. Sapon. dur. Hiſp. ʒij.
Margarit. ppt. ʒi.
Syr. Alth. ℥ ß
Chel. Cancr. ppt. ʒi ß
Aq. Menth. ſativæ
Fæniculi āā ℥ iij

ft. miſtura, cujus ſumatur cochl. infantum octavâ quâq. horâ.

* *Epiſt.* 1. ma.—ad J. B. BASSAND: a phyſician at *Vienna.*

Notice is taken in another place,* of pale ſtools being no uncommon occurrence when children are breeding their teeth. They are alſo met with in fevers, as well as in ſimple diſorders of the bowels; and therefore might be introduced under either of the former heads, inſtead of this place. But as the ſtools are very numerous and watery, and the purging itſelf is the firſt occurrence, it has ſeemed, upon the whole, proper to give it a formal diſcuſſion under the preſent article.

The complaint, however, has been found moſt obſtinate in children who are turned of a year old, and cutting their double teeth. The ſtools are not only clayey, thin, and very white, but curdled like thoſe of very young infants at the breaſt. In the beginning, it is ſeldom attended with any degree of pain, or other complaint, except it be the loſs of appetite; and this has led parents and ſometimes other people to think, that the diſcharge ought to be checked by abſorbents, or opiates. But nothing can be ſo improper; the ſkin ſoon becoming hot, the tongue white, and the diſorder rarely yielding to any treatment under two or three weeks. This is almoſt always the caſe, if teething be any wiſe concerned in the complaint, unleſs the teeth

* See the Chapter on *Teething*.

happen to be nearly cut through: though a purging with pale ſtools, it has been ſaid, is met with in fevers of another kind, where the cauſe is confined wholly to the firſt-paſſages.

Whatever the age of children may be, they are always ſomewiſe indiſpoſed while the alvine diſcharges are of this colour; and whether there be either fever, or purging, or not, children loſe their fleſh; as it is indeed, likely they ſhould from this clay-like matter ſticking to the coats of the inteſtines, and preventing the due abſorption of the nutricious parts of their food. This is eſpecially true, when the ſtools are thick as well as pale; or if they be of a leaden-blue colour and very adheſive, or paſty, and in amazing quantity, as is ſometimes the caſe.

Whether the teething be materially concerned or not, purging is the proper and principal remedy, unleſs the gums are in a ſtate to be lanced, or the ſtools ſhould continue a long time very pale, or clayey, after the fever and purging diſappear. In the latter caſe, ſome ſaponaceous medicine will prove ſerviceable, ſuch as the aqua kali præparati, or a few drops of ſpiritus ammoniæ compoſitus, taken two or three times a day; the bowels being ſtill carefully kept open.

Where dentition is the probable ſource of irritation, and of theſe pale ſtools, but lancing

the gums has not accelerated the irruption of the teeth, or the period is too early to expect benefit from it, children are oftentimes not only free from fever, but are, on the other hand, cold and languid, and should therefore be purged less frequently. Some cordial medicine should also be administered on the intermediate days, as well as on the evenings after the physic has operated.

In the early part of the disease, the active purges are the most proper, such as castor-oil, senna, and sometimes calomel; or, if the fever be considerable, an infusion of burnt-sponge and senna, a preparation equally adapted both to the fever, and this kind of purging.

Another bad kind of stools appears sometimes during teething, that has been alarming to many, as nothing like it, that I know of, appears spontaneously in infants at any other period; though it is not uncommon in adults, and especially, I think, in females. This is a discharge of a very thick mucus, which appears in great quantities; and sometimes accompanied with a little blood.

Neither of these discharges, however, do any harm, if the bowels be kept a little more than usually open, by some soft purgative, and some light cordial interposed, or the test. ostreor. ppt.,

if found neceſſary, in order to ſtrengthen the bowels.

The cauſe of this appearance ſeems to be of the ſame kind with that in adults, and from mere irritation falling on the glands of the bowels, and keeping up an increaſed ſecretion of their natural mucus: and it is well known, that the time of teething, is that in which the bowels are peculiarly liable to irritation.

To the various obſervations that have been made I ſhall briefly add; that there is a diſordered ſtate of bowels, which frequently occurs, and is diſpoſed to continue a long time, during which, infants, though not often preciſely ill, do not thrive, nor look well.—The ſtools are ſaid to be always bad; being ſometimes of a green colour, at others, of a paſty conſiſtence; ſometimes very numerous, and at others, infants are for ſeveral days very coſtive.

In this, as well as other bowel affections before deſcribed, when laxative, alcaline and abſorbent medicines have been found to procure no permanent good effect, calomel often proves a ſovereign remedy; and may be given in the doſe of half a grain, or more, to infants in the month, for two, three, or four ſucceſſive nights. In general nothing purgative ſhould be adminiſtered, the following mornings, but the mercury be

left to its proper aƈtion. It is certain, that this mineral has a marked operation on the liver, obviating a morbid aƈtion, and as a ſtimulant, when inert; and is an equally well known deobſtruent for all the glandular ſyſtem, and will be found a very ſafe and efficacious medicine; infants being known to bear mercury much better even than many adults.

When purgings have continued a long time without any amendment, a peculiar tightneſs of the ſkin will ſometimes take place in the laſt ſtage of the diſeaſe, affording always an unfavourable prognoſtic; and of which further notice will be taken under the article of *Skin-bound*.

I come, laſtly, to treat of the *Lientery*, or true *Watery-Gripes*, ſo called, which is eſteemed the moſt dangerous of all purgings, and is uſually thought fatal, though perhaps without reaſon; ſince if properly treated, children recover from it as well as from exceſſive purgings of any other kind, unleſs it happen after ſome other illneſs, or to very ſmall and tender infants during the month. It is not the having a few very thin ſtools, however, that is an evidence of the true watery-gripes, for in almoſt every purging of a few days continuance, the ſtools are very thin as well as numerous. But in this caſe, they are thin very early in the diſeaſe; the child looks

wretchedly, and every thing it takes runs almoſt immediately through it, with very little change, as in the lientery of adults. It ſhould likewiſe be remarked, that theſe ſymptoms continue, and are increaſed as the diſeaſe advances; it having been already noticed, that there is a ſemblance of watery-gripes, that will otherwiſe deceive, as it requires a different treatment. In this caſe, the ſtools are perfectly watery, and tinged only with the bile, and are very numerous; the thin ſtools ariſing from a violent, but ineffectual effort of nature to get rid of offenſive matter: for upon exhibiting a warm purgative, or caſtor-oil, ſeveral very thick, and always clayey ſtools are brought away. A mixture with chalk and aromatics ſhould then be adminiſtered; to which laudanum ſhould be added, if the ſtools are ſtill too numerous, and the child appears much debilitated. The purging medicines muſt be afterwards repeated as long as the ſtools ſhall be clayey; and the reſtringent cordial interpoſed, as occaſion may require.

In the *true* watery gripes there is not the like indication for purging, but the CURE ſhould be begun by adminiſtering one or more emetics, eſpecially when the ſtools are of a dark colour and fetid; as they frequently are in the earlier periods of the complaint. And to this end, a

pretty ſtrong one ſhould be prepared, which ſhould be given in divided doſes, at about a quarter of an hour's diſtance, till a proper effect is produced; and ſome hours afterwards a warm purge with rhubarb ſhould be adminiſtered, if the diſeaſe be not very far advanced. After the firſt paſſages have been cleared, the eighth part of a grain, or leſs, of ipecacuanha, or a drop or two of wine of antimony, given every three or four hours, with a few grains of the teſtaceous powders, or the aromatic confection, appear to me amongſt the beſt remedies in the earlier periods of the complaint. Indeed, ipecacuanha in very ſmall doſes, eſpecially if duly guarded by ſome gentle aromatic, is both ſo uſeful and ſafe a remedy, that it ſhould not be haſtily laid aſide: and when perſevered in the uſe of for ſome time, will effect wonders, not only in long purgings, but in other chronical complaints. The like may be ſaid of the vinum antimonii, which in the leſs aggravated watery gripes, or where a purging is for a long time attended with very bad ſtools, forbidding the uſe of reſtringents; as well as in ſome little feveriſh complaints, I have found equally uſeful, and even ſometimes more manageable as an alterative than ipecacuanha, becauſe leſs diſpoſed to nauſeate infants where an emetic may not be

directly intended. There being alſo caſes in which the phyſician wiſhes a medicine may operate as a corrector of the ſecretions in the firſt-paſſages, or to expel their contents, either upwards or downwards, as may be ultimately moſt uſeful, antimonials ſeem in this view likewiſe to claim a preference to all other medicines.

In the more advanced ſtages of the watery-gripes, and where the child is not very young, the following old medicine is a very good one. Of *Locatelli's* balſam, one ounce, and conſerve of red roſes, two ounces: from the quantity of an horſe-bean to that of a nutmeg, may be given three or four times a day, according to the age of the child. Others have adviſed red bole, and gum tragacanth.—The labdanum and other plaſters likewiſe, as directed for vomitings, or the following, may be applied to the parts above the navel, eſpecially in caſe of great pain:

℞. Theriac Venet. ℥j.
Olei expreſi macis dict. ʒij.
Olei N. Moſch. gtt. iij.
Miſce, ft. Empl. alut. induc. Or

℞. Axung. Anſerin. ʒij.
Olei epreſſi Macis (dict.) ʒj.
Menthæ ſativæ ℈j.
Bacc. Junip.
Chamæmæl. āā ℈ß

Miſce ft. Linimentum.

Inungatur eo bis vel ter quotidiè Stomachi et Umbilici Regio.

Warm flannel with, or without heated bran, may be afterwards laid over the whole belly, and renewed frequently.

Should theſe means fail, I have known the repetition of a vomit give an immediate check to the complaint, eſpecially where the ſtools continue to be remarkably ſour. As long as this is the caſe, it would be both vain and hazardous to exhibit opiates, or powerful reſtringents: the acidity muſt be firſt carried off by warm purges, and be corrected by abſorbents; the latter of which muſt be given in large and repeated doſes, and frequently their powers be augmented by the addition of aqua kali, or tinctura myrrhæ. And an excellent remedy ſometimes, as an antacid, is the ſpiritus ſalis ammoniaci ſuccinati of Bates's diſpenſatory. The acidity once removed, a ſtarch clyſter may be thrown up, two or three times a day, with, or without a few drops of laudanum, according to the number of the ſtools, and weakneſs of the infant. A drop or two of laudanum likewiſe, may now be given, once or more in the day, (according to the age of the child) either joined with ſome purgative, or in any of the afore-mentioned medicines, or in the

chalk-julep, made warm with tincture of cinnamon, or of cardamoms; and in cases of extremity, in the decoction of Logwood, which agrees very well with young children.—In the advanced stage of watery-gripes, or in the case of great debility, the liberal exhibition of aromatics and opiates is essentially necessary.

Bowel complaints, it was said, are frequently owing to improper food, which on this account, should at all times be peculiarly attended to; and when a purging has taken place, ought to be suited to the nature of the stools. In the last volume of this work, some further notice will be taken of the article of children's food; at present I shall only observe, that cow's milk is often found to disagree with them when their bowels are disposed to be too open, at which times, a little lean mutton broth, or beef-tea is abundantly preferable. On the same account, rusks, and biscuit-powder are more suitable than bread;* but at other times, I believe, either the Uxbridge, or the French roll, which are already half digested by a previous fermentation, are more easily dissolved in the stomach,

* Rusks are preferable to tops and bottoms, as they are called, which have a good deal of butter in them; and are the least disposed to offend an infant's stomach of any thing of the *bread* kind.

if there be not a predominant acid in the firſt-paſſages. But where there is an habitual diſpoſition to a purging, I know of no diet ſo proper for infants who do not ſuck, or who cannot have enough of the breaſt, as flour ſlowly baked for a long time, till it breaks into a ſoft greyiſh-coloured powder,* and afterwards mixed with boiled cow's milk, the ſcum being firſt taken off; the flour and milk ſhould then be boiled a little time together, till the whole appears like a thin cuſtard. This is a very light and ſoft food, and ſufficiently reſtringent; and I have often known more good from it, than from all the abſorbent medicines ever deviſed, and have received more thanks for the preſcription, as it proves a permanent remedy. So alſo the powder of arrow root, boiled in water, and then mixed with milk, is an admirable remedy when it can be procured genuine. When the watery-gripes, or indeed, any violent purging, attacks very young children at the breaſt, no other food ought to be adminiſtered, but the wet-nurſe be changed, if the acidity and purging continue many days, and medicines do not ſeem to take a proper effect;

* To this end, the flour ſhould be put into a ſmall jar, properly covered, and be taken out of the oven ſeveral times, and ſtirred up from the bottom and ſides of the jar, that it may not run into hard lumps, but the whole be equally baked.

which they cannot if any offenfive matter be continually taken into the ftomach.

If infants ill of watery-gripes, are brought up by hand, the ftricteft attention muft be paid to their food, which muft be changed from one kind to another, and efpecially trial be made of broths, as long as the food fhall be difpofed to turn very acid on the ftomach. In one cafe, I think I faved a child by BATES's julepum vitæ, lowered with water, when nothing elfe would ftay on the ftomach. This ferved both for food and medicine; for the former of which it was ftill further diluted.

When children who are weaned, are attacked with repeated purgings, and even broth is found to run through them, I have obferved no food fo generally ufeful as a bit of the white of chicken, not over-boiled, and afterwards lightly bruifed in a mortar with the chicken liquor, and a very little bread, into a kind of light jelly. But this fhould not be given oftener than twice, or at moft, three times a day.

In all bowel complaints, it has been already remarked, that infants are difpofed to eruptions on the fkin; by which they are fo frequently benefited, that if any kind of rafh appears during long and fevere purgings, a recovery may almoft with certainty be prognofticated. The like

good effects have been noticed from a purging taking place in ſome obſtinate cutaneous eruptions.

INCONTINENCE *of* STOOLS.

THE long continuance of the laſt mentioned complaint, as well as others which may debilitate the habit, may prove an occaſion of that now under conſideration. Children who are accuſtomed at all times to have a very open belly, being eſpecially liable to loſe the faculty of properly retaining their ſtools, and need a ſervant continually to attend them, even at two or three years of age; inſomuch that ſome have been ſuſpected of being culpable in the matter.

No very appropriate remedy, I believe, is likely to be neceſſary, having never ordered any thing more than daſhing the parts, daily, with cold water, or at the moſt adminiſtering aquac alcis, or other abſorbent; the complaint always wearing off as ſuch children grow up, though oftentimes not entirely for ſeveral years.

WORMS.

WORMS may, probably, exiſt in almoſt any part of the body, as well as in the ſtomach and

bowels. They have, accordingly, been found in the pericardium, bladder, the nofe, and finufes of the head, and even in the lungs, liver, and other folid parts.* But as we neither know how they are produced, nor how to diflodge them from thefe receffes, which they alfo more rarely occupy in young children, it is quite fufficient to notice the fact; our inquiries being properly confined to worms in the firft paffages.

It is on this account, that the complaint is noticed in this place, efpecially as worms are faid to have been voided by infants of only a few weeks old. It is even reported† that LILLE VAN DEOVERIN has difcovered them in the ftill-born fetus. This, indeed, is much doubted by others, it being a very old obfervation, that worms are never found in infants who are nourifhed only at the breaft; and if fo, it is not likely they can be generated before birth. *Mr. De.*

* *Baglivy* reports, that worms are found in the heart; *Ruyfch* in the lungs, the fpleen, kidneys, in the gonorrhæal difcharge, and even in the marrow of the bones; *Schenkius* in the urinary bladder; *Bianchi* in the uterus and in ulcers; *Hippocrates* in the vagina, and they are faid to be frequently under the fkin in the *Negroes* in our *Weft-India* iflands.

† *Philofoph. Tranfactions.*—The fame author reports that a peafant, after taking an emetic, brought up forty Dutch ells of tape-worm, and yet left fome part remaining, having through his agony, bitten the worm off.

Lille, however, diſputes this, aſſerting, that worms were expelled from his own daughter, when only eleven weeks old, and living entirely at the breaſt.

However this may be, it is evident that worms are much oftener ſuſpected to be the cauſe of children's complaints than poſitively aſcertained; and of this, practitioners who deal in ſecret medicines have in every age made their advantage; it being certain, that a mere foulneſs of the bowels will produce moſt of the evils attributed to worms. Neither are all children equally affected by them where they are actually met with; ſome infant children (as well as quadrupeds) continuing very healthy, though they are ſeldom free from them, and others parting with great numbers, unexpectedly, without any previous indiſpoſition; whilſt ſome children are very ill who have apparently very few. The pains and other complaints in ſuch caſe ariſe from ſome other ſource, of which I lately ſaw an inſtance in a girl of twelve years of age, long ſubject to excruciating pains of the ſtomach, for which ſhe took various worm-medicines, and actually parted with ſeveral large lumbrici, but without the leaſt relief to her pain, which immediately yielded to antiſpaſmodic remedies.

I, neverthelefs, cannot agree with Dr. BUTTER, that worms in the human inteftines are altogether innoxious, much lefs, as he feems to think, ufeful, and intended as "nature's remedy for deftroying the fuperabounding morbid humours; and for ftimulating the firft-paffages by their crawling motions, and thereby affifting the periftaltic motion of the guts to carry off what remains of the offending load."* On the other hand, children who are moft troubled with worms are generally of a coftive habit.

Worms become hurtful chiefly from their numbers; firft, when they obftruct the bowels, or comprefs the adjacent parts by their bulk. Secondly, by fucking up the chyle defigned for the nourifhment of the child. Thirdly, by irritation. Fourthly, by actually deftroying the parts; though this is certainly a very rare occurrence, and a far lefs frequent fource of injury than thofe before mentioned. Worms have, however, been faid to eat their way through the inteftines; and LISTER relates,† that fome refembling the teretes, but of a whiter colour,

* *Remittent Fever.* Pag. 36, et feq.

† *Philofoph. Tranf.* See alfo HEISTER. Their appearance on a fore may, however, be otherwife accounted for than by fuppofing them to have made their way from beneath the ulcer.

have been ſeen coming from an abſceſs on the ankle. They are likewiſe ſaid to have occaſioned ſudden ſuffocation, by riſing up into the throat and lodging there.*

They are chiefly of four kinds, the large round worm; the very ſmall maw-worm, or aſcarides, reſembling bits of thread; the ſhort, flat white worm, or cucurbitina, and the jointed, called the tape-worm, or tænia, which is often many yards long.† This is the moſt hurtful of all, and moſt difficult of cure, becauſe it will remain long in the bowels even after it is dead, and is then ſeldom brought away but in pieces, and that by very powerful medicines; though I think I have ſeen dead portions of this worm come away where no kind of purgative has been adminiſtered. But as this kind of worm is certainly not common in children, though it may ſometimes have been met with; and as it generally occaſions a variety of ſymptoms reſembling other complaints, for which many different medicines may be required, little more than the mention of it may ſuffice.‡

* MR. LE FEBURE DE VILLEBRUNE.

† The *cucurbitina* is thought to be a certain ſpecies of *tænia*; and the *aſcaris lumbricodes* to be confounded with the *teretes*.

‡ It is ſo uncommon to find more than one of this kind, that it has acquired the name of the ſolitary worm; yet it is

The SYMPTOMS of worms are various, and many of them very equivocal: I ſhall name only the more conſtant, and leſs uncertain ones. Such are fetid breath, eſpecially in the morning; bad gums; itching of the noſe and of the anus, eſpecially from the aſcarides; a very irregular appetite, always in extremes, whether of hunger or of loathing; a large, hard belly; pains at the ſtomach; ſometimes vomiting, oftener coſtiveneſs or purging, with ſlimy ſtools;* irregular colicks; thirſt; dulneſs; peculiarly unhealthy and bloated countenance, with a dark, hollow circle round the eyes; ſtartings in the ſleep, and grinding of the teeth. To theſe ſymptoms are often added, ſlow fever, with a ſmall and irregular pulſe, pale, or whitiſh urine, a ſhort and dry cough, (which is an almoſt conſtant ſymptom where the complaint is of long ſtanding, and has injured the health;) ſometimes even convulſions, epilepſies, and partial palſies of the lower

ſaid there are a few inſtances in which ſeveral of them have been met with; but perhaps, attention enough may not have been given in the examination of them, it being well known, that this worm will live a long time after it has been broken into ſeveral parts. See *Letter* of *Dr. Nitret* to *De Haen, Act. Med.* xij. 219.

* The periſtaltic motion of the inteſtines being increaſed, the ſecretion of the mucus muſt conſequently be in larger quantity.

extremities. In the cafe of convulfions, if there be a fmall pulfe attended with a hiccough, it is an almoft certain fign that the convulfions are occafioned by worms. The like may be faid of pain at the ftomach, if it be very violent, fudden, attended with great anxiety, and a hardnefs and forenefs of the parts above the navel. But more efpecially, according to HOME, an edematofe fwelling of the upper lip, and of the noftrils is a certain token of worms.

The CAUSE of this troublefome complaint is not, perhaps, certainly known; but the great moifture of young perfons is thought to be an occafion of their being more infefted with them than older people: and children, whofe digeftion is weak, are more liable to them than others. —Hence, debility feems as much a caufe, as it is an effect of worms. Since the doctrine of equivocal generation has been juftly exploded, it has, however, been generally imagined, that worms are engendered from the eggs of infects, which float in the air, or are fwallowed with fome part of our food, fuch as fummer fruits, vegetables, cheefe, and fome kinds of flefh meats. But, perhaps, this is not altogether fo certain as it may feem at firft fight, unlefs we are to imagine that thefe fuppofed eggs produce very different infects, from being taken into the

ſtomach and bowels, than they would if depoſited elſewhere; ſince it is generally thought, that inſects of this kind, eſpecially the tape-worm, are not met with any where elſe;* neither will it account for their exiſtence in the unborn fetus, if that be really a fact. It is, however, more than probable, that they were deſtined by nature to be generated, and to live in the bodies of other animals, as obſerved by Dr. BLACK,† and ROSSEEN.

But whatever be the cauſe, the general intention of CURE is obvious enough, which is to

* Although this ſeems to be the fact, there are not a few learned men of a different opinion. Many travellers, and others, better acquainted with natural hiſtory than I am, have reported, that the very ſame kind of worms may be met with amongſt vegetables, in the earth, and both in ſtanding and running waters. That the *tape-worm*, particularly, has been ſeen in the waters about *Constantinople*, where the complaint is very common; and that natives of northern climates, who have reſided for any length of time in *Turkey*, are very frequently afflicted with the tænia, as it is ſuppoſed in conſequence of drinking of the foul ſtanding waters of that hot climate. LINNÆUS alſo, and others have thought the *teretes* or *lumbrici*, to be the ſame with the common *earth-worm*; but TYSON has, by diſſections, demonſtrated the contrary. *Philoſoph. Tranſactions.*

† *Treatiſe* on the *Generation of inteſtinal Worms*, and on the *Means of deſtroying them.*

See alſo, *Diſſert. of J. Mathieu Geſner, Men. Gotting. an.* 1751.

bring them away in the moſt eaſy, and expeditious manner, whether alive or dead; the difficulty chiefly conſiſting in diſlodging them from their firm attachment to the ſides of the bowels.

In this view, ſyſtematic writers ſtate the indications to be, firſt, to deſtroy the nidus; and ſecondly, to kill and expel the worms. The firſt may be effected by alcalis, as aq. kali ppt. ſapo venet. bitter aromatics, and mercury; or by reſolvents, as the gums, aſafœtida, galbanum, and ſuch like. Secondly, worms are killed by oils, (in clyſters) by honey, and by indigeſtible ſubſtances, as the teſtaceous powders, ſteel, and tin; and by poiſons, as preparations of mercury, which at the ſame time expel them. To theſe ends, indeed, a variety of medicines, pretty much of the ſame kind, has been deviſed, and has ſerved the cauſe of empiriciſm in every age. Moſt of which conſiſt either of the bitter purges, or mercurials.

Worms exiſting in the bowels can, indeed, only be carried away by purging; and very active purges are indicated when the time of life and the conſtitution do not forbid. But when theſe are tender, gentle purges given duly for ſome time, by the conſtancy of their operation produce, without harm, an effect equally, or perhaps more beneficial and laſting, than the

active purges. These are often joined or administered alternately with bitters; and hence have arisen the family receipts, as worm-seed, tansey, and such like, given in treacle or honey; or joined, as it has been said, with rhubarb, senna, or other gentle laxative. With many, and especially French writers, the male-fern, alone, is reckoned a specific. Olive-oil, likewise, has been said to be a good remedy, as being destructive to worms; but castor-oil is preferable, which by its purgative quality also carries them off by stool.

Agreeably to the above view of gradually ridding the habit of these vermin, children of a delicate frame, and such as have not been long infested with them, may begin by taking a small dose of infus. sennæ every other morning; but should this, in any instance, prove insufficient, a few grains of pulv. è scammon. cum calomel. may be given the over-night, once or twice a week, according to the age and strength of the child; and some tonic medicine be interposed. If purging much should, on any account, be found improper, the following is very safe and often effectual.

℞. Limatur. Stanni ℥ij. Hydrargyr. ʒiij.
Misce, fiant amalgama.

Eight or ten grains of this powder, with three or four grains of rhubarb, and as much unwashed

calx of antimony, may be taken every morning in a little honey, for a week together; after which, a clyſter of ſuccotorine aloes, diſſolved in warm milk, ſhould be thrown up over-night, and a proper doſe of rhubarb, or ſenna-tea be taken the next morning: which courſe may be repeated, as the obſtinacy of the complaint, or the ſtrength of the child ſhall direct.—Volatile alkalis alſo, in ſome debilitated habits, will prove ſerviceable; as well as valerian, eſpecially if it be occaſionally joined with jalap. But one of the moſt powerful means, long in uſe with country practitioners, and of late ſtrongly recommended by Mr. CHAMBERLAINE, is the dolichos pruriens, variouſly prepared; but the moſt ſimple form, that of giving it mixed up with treacle, is, perhaps, the beſt of all. It ſhould be taken night and morning for three or four days, and then be purged off with ſenna-tea, or jalap; and this courſe be repeated, as occaſion may require.

Amongſt other means, eſpecially for ſuch as may be at a diſtance from medical aſſiſtance, is a mixture of pewter filings and treacle, of which children of four or five years old, may take ſeveral tea-ſpoonsful in a day, almoſt at pleaſure; which they will alſo readily do, for the ſake of the treacle. At the ſame time, from five to ten grains of jalap, with as much of the hy-

drargyrus cum ſulphure ſhould be given twice every week, to purge off the dead worms. Dr. RUSH of *Philadelphia*, ſtrongly recommends the ruſt of iron, from five grains to half a dram, for infants from one year old to five, exhibiting a purge every fourth or fifth day, to carry the worms down, as they die. To anſwer the laſt purpoſe, the following plaſter is ſometimes ſufficient,

℞. Aloes ſuccotorin.

Pulv. flor. Chamæm. āā ʒj.

Tereb. venet. Q. S. ut ft. Emplaſtrum (cum margine emplaſt. adhæſivi) apud regionem umbilici admovendum: ſed antea applicationem, imponatur loco umbilici morſum goſſipii. Or equal parts of bullock's gall, and powdered aloes, may be mixed up with any unctuous ſubſtance, and the parts below the navel be anointed with it, two or three times a week; or ſuccotorine aloes and powder of dried rue, made into a plaſter with Venice treacle, and applied round the navel, firſt covering that part with a little cotton.—I mention theſe things with a view to the country poor, whom the benevolence of practitioners may incline them to aſſiſt, and who may, by theſe eaſy means, do it at ſo little expence to themſelves.

If the complaint, however, has been of long ſtanding, and the child not very young, mercurial purges are a more expeditious, and a ſafe remedy; though the hydrargyrus cum ſulphure taken for a length of time, and occaſionally purging with ſenna, has ſometimes ſucceeded, even where there have been the ſevereſt convulſions. For which likewiſe, or obſtinate contractions of the limbs, the warm-bath is often eſſentially neceſſary.

Throughout the cure, and indeed afterwards, the diet ſhould be ſtrictly attended to, and all fat and greaſy aliments abſtained from. The child ſhould live upon milk, broths, and meats of eaſy digeſtion, with toaſted bread and honey, inſtead of butter, which is exceedingly pernicious.—To prevent a return of the complaint in older children, or grown people, chalybeate-waters and bitters may be made uſe of.

As it is not my intention to enter formally into the diſtinct treatment often neceſſary for the *tænia* (which, indeed, I have ſometimes ſeen brought away by very gentle means;) I ſhall do no more than refer to SHMUCKER's new medicine, as well as the celebrated remedy of *Madame Nouffer*, ſaid to be made uſe of with great ſucceſs in *France* and *Geneva*; as I have alſo known it to be, two or three times, in this

country. It can, in nowiſe, however, be proper for young children, though it may, poſſibly, be ſafely had recourſe to for robuſt youths, growing up to manhood. It is intended to operate very powerfully on the bowels for many hours, the patient being ſupported the while by repeated large draughts of broth, or green-tea.

The preparation of the preceding day, and ſome other preciſe directions, are equally needleſs in this place, and perhaps the previous exhibition of two or three drams of the Radix Filicis maſculini, is of as little importance.—For a full account of the proceſs, the reader is referred to *Madame Nouffer's* Treatiſe, publiſhed by Dr. SIMMONS *anno* 1787.

The purge is as follows:

℞. Mercur. dulc. optimè ſublimat.
Reſin. Scammonii elect. ā. gr. x.
Gambogiæ gr. vj. vel vij.
Conſerv. Cynoſb. Q. S. ut ft. bolus.

The Cevadella or Indian Cauſtic Barley is recommended by *Shmucker* in the fifth volume of the *Journal de Peterſbourg** as an almoſt infallible

* Mr. LOEFLER, the author of the *Journal* aſſures us, that it may be taken thus with perfect ſafety; and annexes caſes of its ſucceſs in expelling worms of different kinds. A very powerful remedy, much uſed in the *Weſt Indies*, particularly for the *lumbrici*, is the *Spigelia Anthelmia*, a ſpecies of Indian

remedy for the tinœa. He directs a dram of the ſeeds, in fine powder, to be given every morning, faſting, mixed with honey; and to exhibit on the fifth morning a draſtic purgative.

Dr. JAMES SIMS has lately ſucceeded with the ol. tereb. of which the patient for another complaint had taken two drams as a doſe.

CONVULSIONS.

CONVULSIONS have been ſaid to be induced by the laſt mentioned, and ſeveral of the preceding complaints. They are of two kinds; the *ſymptomatic*, and the *idiopathic*; though the diſtinction may not, perhaps, be perfectly philoſophical, or accurate. It is for want of ſome ſuch diſcrimination, however, that writers have had occaſion to obſerve, that children are much oftener ſuppoſed to die of convulſions than they really do; for though a convulſion frequently cloſes the ſcene, it has generally ariſen from the great irritability of their nerves, and violence of the diſeaſe under which they have laboured. But ſhould it be granted, that the convulſions of children are generally ſymptomatic, infants may, nevertheleſs, be ſaid to die of them more fre-

Pink; but it has not as yet, I believe, been made uſe of in this country.

quently than ſome authors have allowed; for where a diſeaſe is diſpoſed to produce violent convulſions, the convulſions, though a mere ſymptom, may carry off the patient: and as it may ſometimes be prevented or removed, by its proper remedies, (the diſeaſe which occaſioned it being at the ſame time properly treated,) infants may often be recovered, who would otherwiſe expire in a convulſion-fit.

Such original CAUSE may be a raſh improperly repelled; but is much oftener ſeated in the gums, in the time of teething; or in the firſt-paſſages, where ſome undigeſted matter, or merely pent-up wind, irritates the coats of the inteſtines, and produces irregular motions throughout the whole nervous ſyſtem. ZIMMERMAN* relates an inſtance of this kind, of a child who during the firſt months of its life, had frequent attacks of violent convulſions, which diſappeared intirely, upon the prohibition of meal-pap. Indeed, too much caution can ſcarcely be given on this head, thick victuals being a very frequent occaſion of convulſions in young children. Many infants can bear no kind of thickening in their food; any ſort of bread, ruſk, &c. diſordering their bowels, by occaſioning their contents to

* *Acta Societatis Zyrick*, Vol. 2.

turn paftey, and cleave to the coats of the inteftines, whereby, it has been noticed, a due abforption of the nutricious part of the aliment is prevented, fo that children, in the daily habit of taking fufficient food, are, neverthelefs emaciated. Weak and tender as they are, they in this ftate require repeated purges, efpecially of caftor-oil, with fome light cordial on the intermediate days, and a total abftinence from farinaceous food. For fuch children, veal-tea mixed with milk, is amongft the moft innocent and nutricious. Any offenfive load, whether from too great a quantity, or bad quality of the food, by occafioning a faulty fecretion, muft act like a poifon; and that the convulfions are owing to this caufe may often be known by the complaints that have preceded them, fuch as loathings, coftivenefs, purging, pale countenance, large belly, and difturbed fleep. If the child is two or three years old, any load at the ftomach may be more readily difcovered; the tongue will be foul, the fkin hot, and the pulfe quick and weak.

Any little matter capable of irritating the nervous fyftem, will induce the fymptomatic convulfions in fome infants, whilft others will withftand a great deal. For fuch habits as the former, the cold-bath will be found the beft preventive. Every young infant is, however, more

or less, pre-disposed to this complaint; and the disposition continues throughout childhood, in a proportion to the tender age, and delicacy of the habit. The younger and more irritable, therefore, an infant may be, it will be so much the more liable to the symptomatic convulsion, especially from any considerable disturbance in the first-passages, as was mentioned before, particularly the bad quality, or over thickness of the breast-milk, or other food; and from frights of the wet-nurse. Of this I remember a remarkable instance in a patient of my own, in whose house a visitor dropped down suddenly dead. The mother of the child, which was six months old, was exceedingly alarmed, but her attention being for a moment called off by its crying, she incautiously put it to her breast. It was not an hour afterwards that the infant was seized with a fit, and lay either convulsed or comatose, without so much as taking the breast, for the space of six and thirty hours; though it was at length happily recovered.

Among the various causes of convulsions, (though equally an occasion of many other complaints) may be mentioned that of foul air, and want of cleanliness in the dress, and other accommodations of infants; against which, the lower class of people cannot be cautioned too often, or

too earnestly. Such a source of convulsions has been particularly exemplified in a disorder whose attack being within the first nine days after birth, has been denominated the *nine-days disease*. Readers desirous of a full account of it, are referred to a paper of Dr. CLARKE of *Dublin*, published in the Transactions of the Royal *Irish* Academy for the year 1789.

It is noticed on the present occasion, however, merely to record a fatal convulsion, induced by mismanagement: it being mentioned by Dr. CLARKE himself as altogether an endemic in the *Dublin* lying-in-hospital, where it raged for many years, and carried off some thousand children. But it appearing after a while to the Doctor, that the disorder might probably be entirely owing to bad air, and want of cleanliness, he was at great pains to remedy these local defects; and thereby prevented those very frequent attacks of a disease, which under the former circumstances, none of the physicians had been able to cure, in a single instance.

The cure of every convulsion will consist, principally, in removing the exciting causes, which must, therefore be inquired into. If from improper food and indigestion, a gentle emetic should be given. If the irritation be in the bowels, whatever will carry down their acrid con-

tents will cure the convulſions, if adminiſtered in time; and we ought generally to begin with a clyſter. If the ſtools appear very foul after common purges, (in which caſe there will frequently be a difficulty of breathing) a few grains of the pulv. è ſcammon. cum calomel. may be given with great propriety. But if the diſpoſition to convulſions continues, after the bowels have been properly cleanſed, and no new irritation of them may be apprehended, anti-ſpaſmodics ſhould be adminiſtered,* ſuch as tinctura fuliginis, caſtor. ſpir. cornu cervi, ol. ſuccini rectif. a drop or two of tinct. opii, or olei rutæ; which though an obſolete medicine, is a very excellent one. The continuance of the convulſion here treated of,

* I ſpeak from my own experience of the efficacy of ſuch remedies, and it may not be amiſs to obſerve, that HARRIS, who is extremely cautious of giving heating medicines to infants, ſpeaks favourably of ſome of theſe.—" Uſus horum (ſays he) haud prorſùs improbandus eſt, vel in tenellis: nempe quia acidum abſorbendi facultate excellunt. Verum ſummâ cautione," &c.—Great caution is certainly neceſſary in regard to every medicine preſcribed for infants, and eſpecially, it has been granted, for thoſe of a heating quality: nevertheleſs, it may be repeated, that in proportion as the diſorders of infants ſhall become more attended to, I doubt not, it will appear that, in this country at leaſt, cordial and volatile medicines are frequently both more expedient and uſeful, than many people have imagined.

frequently depends on the debilitated ſtate, or tender age of the infant. The oil ſeems to act by invigorating, and reſtoring a due tone to the alimentary canal, the grand ſpring of good health. A remedy leſs common than thoſe above mentioned, but in ſome inſtances given with the beſt effect, is the zincum vitriolatum purific. This adminiſtered in a proper doſe uſually acts as an emetic, and if it ſhould, muſt be continued afterwards in ſmaller doſes. Dr. COOKE very ſtrongly recommends a mixture with ſpermaceti and ol. aniſi, and perhaps ſuch a medicine from its ſheathing and warm carminative qualities may be as proper as many other; though the ſtile of the author is not likely to recommend his preſcriptions very ſtrongly in the preſent day.* Rubbing the ſpine, palms of the hands, and ſoles of the feet with oleum ſuccini, or the aqua ammoniæ has likewiſe had a good effect; as well as frictions over the whole body; which from the conſent of parts, ſeems to afford more benefit than might be imagined.—A very common cauſe of recurring convulſions, has been ſaid to be worms;

* After having looked into almoſt every work that has fallen in my way, on the ſubject of infantile diſeaſes, I did not expect to meet with any thing of ſo late a date as 1769, that could reflect any ſuch diſgrace on the practice of phyſic, as the very anile performance of this writer.

and where no other probable one may appear, ought to be fufpected: the cure will then depend on the proper treatment of that complaint, the fymptoms of which have been already fufficiently pointed out.

Should the convulfions arife from the difappearance of a rafh, or of a difcharge behind the ears, the warm-bath, blifters,* gentle purges, or a few drops of the fpiritus ammoniæ comp. joined with fal fuccini, have been already mentioned as the proper remedies. But when the caufe is unknown, as the approach of fmall-pox, meafles, or other eruptive complaint, bathing the feet in warm water, and throwing up a clyfter, are the fafeft means. If from teething, after gentle evacuations and other means directed

* Blifters may be dreffed with the common white cerate, rubbed down till it becomes fmooth, and fpread upon a double linen cloth, inftead of the hard plafters commonly made ufe of, which are very harfh to the tender excoriated furface.—Blifters will fometimes inflame, or be for many weeks indifpofed to heal up, in children as well as in adults; in either of thefe cafes, covering the part with a collard or other foft cabbage-leaf, (with the hard fibres on the back part cut off, and gently bruifed with a kitchen rolling-pin) will often remove the inflammation fooner than any other application. Dufting the furface afterwards with the finely levigated powder of lapis calaminaris will frequently difpofe the ill-conditioned ulcer to heal.

under that head, bliſters, oleum rutæ, laudanum, or the ſpiritus ætheris vitriolici comp. and eſpecially lancing the gums, are the grand remedies. And in a view to the latter, it may not be improper in this place, to anticipate ſome of the directions for doing this little, and moſt ſalutary operation,* more effectually than it, uſually, is; eſpecially in the caſe of convulſions. It is pretty well known, indeed, that it is not ſufficient to cut down boldly to the tooth, and liberate it in every part; nor merely to free all ſuch teeth as are manifeſtly making their way; but that others alſo muſt not be overlooked, which though leſs evidently, have oftentimes a ſhare in the miſchief. But that which I would here alſo inſiſt upon, is, to repeat the operation frequently, till either the teeth make their way, or the convulſions diſappear. And as no harm can ariſe from the repetition, I wiſh to enforce the idea very ſtrongly, in every inſtance, where teething is regarded as a cauſe of covulſions: a perfect cure of very obſtinate fits being ſometimes effected by lancing the gums for even five or ſix days ſucceſſively. The obvious reaſon of this diſtinction, is, that the divided parts often tumify, or heal up again, and give riſe to ſuffi-

* See the chapter on Teething.

cient irritation, in certain habits, to keep up convulsions, which on the other hand, yield upon securing the nervous parts from fresh irritation occasioned by the continued protrusion of the teeth. In this view it will sometimes be proper to lance the gum across, as for the double teeth, as suggested by Mr. WARE in the case of ophthalmy occasioned by difficult dentition.

When repeated convulsions connected with some disorder in the first-passages, and recurring for several months, withstand all the above means of cure, and are suspected to arise from some fault in the brain, they will sometimes disappear of themselves as the infant gets older. At other times, the appearance of some other complaint has put an end to the convulsions; and not unfrequently, changing the wet-nurse; and sometimes even weaning children, when six or eight months old, has seemed to remove the complaint. I remember a remarkable instance of the concurrence of two of these circumstances; the child being seized with the small-pox, and weaned, at or near the same time. The infant previously to this, for several months together as constantly fell into violent convulsions as it chanced to chew a crust of bread, eat a bit of plain pudding, or even take bread and milk; and though when debarred from these, and

nouriſhed only at the breaſt of a healthy nurſe, the fits recurred every two or three weeks; but after going through the ſmall-pox in a favourable manner, and being taken wholly from the breaſt, the fits ſoon diſappeared, and the child was able to take all the light food uſually given to infants.

If convulſions come on without any of the preceeding ſymptoms, they have generally been concluded to be a primary diſeaſe, and to proceed immediately from the brain. Some derivation from the head is therefore to be attempted, by bleeding if the child ſeems able to bear it; or by leeches behind the ears, on the temples, or inſide of the arms; by bliſters; purging; bathing the feet in warm water; friction of the legs, and rubbing the ſoles of the feet with the aqua ammoniæ. If children of two or three years old are ſubject to ſlight and frequent fits, iſſues or ſetons ſhould be made between the ſhoulders, or in the neck, and be kept open for a length of time: and in weakly children chalybeate waters may be uſeful.

The idiopathic convulſion if not removed in a few days, is that from which future bad conſequences may ſometimes be expected, being followed by a temporary loſs either of the ſight, or hearing, and ſometimes of the intellects. If the

former, it is attended with an unmeaning countenance and a conſtant ſtare and motion of the eyes. If water in the head be not particularly ſuſpected, and the common vervous medicines, with purges and bliſters have had no good effect, bleeding with leeches, and repeated emetics ſhould be had recourſe to; and if the bowels continue in a good ſtate, the aqua kali, as a diuretic, may be made trial of.

Such are the uſual remedies to which recourſe has been had for the idiopathic convulſion; but of late years I have been led to make trial of muſk; and from no ſmall ſucceſs, think I am warranted in ſtrongly recommending it to the notice of phyſicians. And I am the rather led to this, becauſe I conceive it to have been long out of repute as a remedy for children, and probably one that has never had a proper trial in their nervous affections; as in that caſe, we ſhould expect it would have been noticed more particularly by the older writers.*

* It is not my intention, however, to aſſert that muſk, has at no time, been frequently adminiſtered in theſe caſes; though it is probable not very lately. I am not ignorant that many valuable medicines have been long neglected, in favour of others of the ſame claſs, and been taken up again at a future age. Practitioners, neverthelefs, ought to ſtate what has been their own experience of any medicine, in preference to others, after a fair trial of ſeveral, in particular complaints.

In ſome of the worſt caſes, however, of long continued convulſions, and fits apparently truly epileptic, not to be attributed to the uſual cauſes of infantile irritation; as well as where all the cuſtomary remedies have been previouſly and unſucceſsfully tried, a free exhibition of muſk has reſtored children to health. And this not only where the long continuance of the fits has led good phyſicians to pronounce them idiopathic; but where the convulſions have alſo induced total blindneſs, or otherwiſe deranged the faculties for ſeveral months.—At leaſt, I may aſſert, that an immediate abatement of the fits has followed the exhibition of this medicine, and in the end, the removal of all its ill-conſequences.

But when the *idiopathic* convulſion attacks very young children, it generally terminates very ſoon, ſometimes indeed, inſtantly; and in many is fatal before any means can be made uſe of; eſpecially in the caſe of hydrocephalus. I have, however, often imagined that we are frequently miſtaken in regard to ſuch haſty deaths, and that when convulſions prove ſo ſuddenly fatal, they are more commonly *ſymptomatic*, and are occaſioned much oftener than is ſuſpected by over-feeding.—I have known ſome of the largeſt and fineſt infants I have ever ſeen, die ſuddenly in

the month, immediately after the nurſe had boaſted of their having eating three boats-full of victuals.

In this view of the diſeaſe, a few words more may not be wholly unneceſſary, eſpecially as they will hold out much comfort in regard to this alarming complaint; by which, I am however aſſured, many infants have periſhed merely from its not being properly diſtinguiſhed. For though, indeed, all convulſion-fits are in their appearance exceedingly ſhocking, yet under proper treatment they are much leſs frequently fatal than is commonly imagined, however often they may recur,* neither is the frequency of their returns during infancy, nor the long continuance of ſuch a diſpoſition an indication of future evils, if the fits themſelves be of the kind here ſuppoſed.† But though experience warrants my ſpeaking with confidence on this head, with a view to

* The account in the yearly bills of mortality is eſpecially erroneous in regard to this complaint, and has perhaps added to the alarm which the appearance of a convulſion univerſally occaſions.

† The above obſervation is, I believe, ſtrictly true in regard to ſuch kind of fits; and though in ſome others, as hinted before, the intellects have appeared afterwards to be impaired, yet are the inſtances ſo very few, that there is, upon the whole, little room for alarm in the apprehenſion of ſuch conſequences.

prevent any unneceffary diftrefs, yet would I, by no means, put the practitioner off his guard; fince the recovery, in many cafes, depends fo entirely upon an expeditious ufe of the remedy, that even the time loft in fending abroad for a remedy may be fatal to the infant.

Fits of this kind are, indeed, pretty generally known to arife from irritating matter confined in the firft paffages, as has been already explained, but I believe it is not fo generally underftood, how often fuch matters are lodged in the ftomach, (perhaps the pylorus itfelf;) or *very low down* in the rectum. Inftances of the latter are not wanting, wherein the hardened feces have lain fo low as to dilate the fphincter ani fufficiently to expofe them to view, and yet the infant been dead before a clyfter could be procured from a neighbouring apothecary's; whereas fuch fits ceafe immediately after a plentiful evacuation from the bowels, artificially induced: fo alfo have I feen an infant in the month, lying torpid for an hour together, in a kind of fit, and apparently in the very article of death, brought out of it entirely after a large and fpontaneous difcharge of thick feces. In like manner fudden death has taken place when the load has been in the ftomach; whilft other children have been faved by fpontaneoufly throwing it up. Whether in the former

case, the noxious irritation be in the rectum, which may, possibly, be doubted; or from the obstruction there, acrid matter be confined higher up, is not of any particular importance; the confined feces below, and their timely removal being, alike, the certain occasion, and remedy of the evil.

After what has been said, it would be scarcely necessary to point out the remedies in a formal way, but for the sake of directing the most expeditious manner of applying them. In the first instance, doubtless, the obvious means are a soap clyster with two or more tea-spoonsful of salt, (such articles being always at hand) and afterwards administering one or other of the purges formerly directed; which it may often be necessary to repeat for some days, perhaps with an interval between. But when an infant falls suddenly into a convulsion very soon after sucking, or feeding, especially if on any thing actually improper, and the bowels have been for some days in an orderly state, it may reasonably be presumed, that the irritation is in the stomach, especially if there be an unusual paleness of the countenance, indicating sickness; or on the contrary, any considerable blackness, with symptoms of suffocation; which I think do not come on so soon when the obstruction is in the bowels.

And it ſhould here be remarked, that it is not neceſſary, that the load in the ſtomach ſhould be conſiderable in quantity in order to induce ſuch ſudden and alarming convulſions; it is ſufficient that the ſtomach be really oppreſſed by it to a certain degree; nor does it always appear to ariſe ſo much from an oppreſſive abundance, as from a ſmall piece of undigeſted food, irritating, and perhaps confined as has been ſaid, in the pylorus.

In the caſe here deſcribed it would be improper to think of a formal emetic, at leaſt without making trial of ſome more expeditious means, ſuch as irritating the pharynx with the finger, or a feather, or forcing in the ſmoke of tobacco, if that be at hand; either of which often inſtantly produces vomiting, and puts an end to the fit. To this end, the child ſhould be ſupported by a hand placed under its ſtomach and belly, whilſt the feather or other means are made uſe of; in which poſition the infant will be made to vomit more readily, and with leſs ſtraining, than in any other.—It is hoped that the importance of the ſubject, as well as the very frequent ſucceſs attending the plans laſt recommended, under the moſt alarming appearances, may be thought an apology for the length of this chapter, as well as the ſort of repetitions made uſe of.

It is further to be noted, that ſymptomatic convulſions are ſometimes the effect of a ſalutary effort of nature, to produce a criſis in ſome diſeaſe the child labours under; in which caſe, great caution ſhould be uſed not to be over officious: bathing the feet in warm water, however, as mentioned before, will be perfectly ſafe, and perhaps uſeful. Having ſpoken of opiates, I ſhall juſt obſerve, that though they are often very ſerviceable, when judiciouſly preſcribed, they become very hurtful if improperly adminiſtered. They will, however, always be ſafe, where convulſions continue after the firſt exciting cauſe has been removed; or where they are ſo violent as to become an obſtacle to adminiſtering proper remedies; or when the original complaint is of a ſpaſmodic nature. When ariſing from debility and languor, the tinct. valer. volat. adminiſtered in ſome generous white-wine, has been found a ſucceſsful remedy.

When convulſions occur many times in a day, it is of importance to attend to the diſtance of the paroxyſms; from which a much better indication may be had of their immediate danger, than from the forcible contraction of the muſcles during the fit. For, where the intervals are ſhort, though the fit itſelf be not long, nor violent, the diſeaſe is more dangerous than where

ſevere paroxyſms are attended with long intervals.

PARALYSIS, *or* PALSY.

THE Palſy is a more common diſorder in infants, and young children, than writers ſeem to have imagined, being confined to no age, (having been ſeen as early as the third day after birth) and attacking children in very different degrees, in the manner it does adult perſons. It, accordingly, ſometimes ſeizes the upper, and ſometimes the lower extremities; in ſome inſtances, it takes away the entire uſe of the limbs it has attacked, and in others, only weakens them. Sometimes the ſpeech is very much affected, and at others not at all; the intellect is alſo greatly impaired in ſome inſtances, and in others is only torpid; for though children may be dull and heavy, like other paralytics, yet when rouzed, their imagination is found to be fully awake to the common objects around them.

The palſy more commonly appears in the form of hemiphlegia; but if it be neither fatal, nor ſoon cured, it is often found to ſteal imperceptibly upon the other ſide of the body. In one inſtance, I was witneſs to the paralytic affection

quitting one ſide, to ſeize the other, only two days before the child died.

In any caſe, the palſy in young ſubjects is to be treated in much the ſame manner as in adults; and being uſually attended with coſtiveneſs, calls for briſk purges in the firſt inſtance, and a repetition of opening medicines throughout the courſe of the complaint. And, indeed, if cathartics and bliſters do not ſoon afford relief, the diſorder uſually becomes chronical, and the child ſinks gradually in the courſe of a few months, or drags on a miſerable life for ten or twelve years, with more or leſs debility of the arms or legs; but very rarely arrives at manhood. Indeed, the cauſes of palſy, particularly in young people, who are ſtill growing, are ſo numerous, and are often ſo entirely out of the reach of art, as well from their nature, as their ſeat, being frequently in the nerves themſelves, or the brain, that ſuch an event cannot be wondered at.

But where no morbid change of parts has taken place, perhaps infants and young children are oftener perfectly cured than thoſe more advanced in years, by the mere exhibition of two or three briſk purges, whereof calomel often forms a neceſſary part, as the palſy frequently originates from foul matters in the firſt-paſſages

After purging, bliſters ſhould be applied, and if no fever attends, nervous medicines be adminiſtered, ſuch as valerian, caſtor, ammonia præparata, and the ſpiritus ætheris vitriolici compoſitus. In ſome inſtances, the bark and ſteel have proved uſeful; or frictions with flannel and aromatics, or ether, and the uſe of the waters at *Bath*; and as frequently as any other mean, electricity, eſpecially if inſtead of giving ſhocks, the electric aura only be applied, or ſparks drawn from the body ſeated in the inſulating-chair. If the head be much affected, a ſmall bliſter, or leeches applied to the temples may be proper, in certain habits.

When the palſy becomes chronical, more general remedies will be called for, according to the particular ſymptoms that may occur; but more commonly, remedies of the warmer claſs.

The palſy is ſometimes occaſioned or ſucceeded by water in the head; and in the former caſe, the ſutures of the ſkull being generally ſtill open, and allowing of diſtention, the ſymptoms of compreſſed brain will not appear ſo ſoon as they otherwiſe would.

In the ſuſpicion of hydrocephalus, mercury, and diuretic medicines may be made uſe of; though it is to be feared, with but little proſpect

of ſucceſs, when the original diſeaſe has proceeded thus far.

I have noticed a few inſtances of a partial paralyſis of one, or all the extremities; but this has always given way very ſoon. Beſides teething infants, whom it has been ſaid to attack, I have ſeen it in others who are older, and the fineſt children, and is then generally attended with a foul ſtate of the bowels. In any caſe, the only remedies I have found neceſſary, have been calomel or ſome other purgative; ſometimes an emetic, and volatile embrocation to the limbs. Electricity, I am told, has been adviſed in one inſtance; and if the complaint ſhould not otherwiſe yield, may as properly be had recouſe to in this, as the former inſtances.

SKIN-BOUND.

THIS being a ſpaſmodic affection, and ſometimes attended with the convulſion called tetanus, may very properly be noticed in this place. It is a diſorder but little known either to the antient or modern writers, (and has been leſs underſtood;) being only twice publicly noticed, that I know of, until a few years ago. The one at the beginning of this century, in a ſtill-born infant, in the hoſpital, at *Stockholm*, and

the other about forty years ago, in a *Neapolitan* girl of ſeventeen years of age, in the royal hoſpital at *Naples*; the ſucceſsful treatment of whom, I think, may throw ſome light on this diſeaſe, hitherto ſo little known. The former is accurately deſcribed by UZENBESIUS, and recorded *in* SCURINGII, *Embrologia (de fætu frigido et rigido*,*) but without adverting at all to its treatment. The caſe, as I ſince find, is tranſcribed into the *Ephemerid. Academ. Naturæ Curioſor. Cent*. ix.

The above is related in a manner importing it to be an uncommon occurrence, and the diſeaſe at that time little, if at all known: and though recorded in two diſtinct works, (the latter of which is rather conſulted than regularly peruſed) the caſe ſeems to have been generally overlooked, and conſequently the true nature of the diſeaſe remained nearly in its original obſcurity. It was, indeed, not till a twelvemonth after my ſhort account of it appeared, that this diſorder began to engage the attention of the *French* phyſicians, in conſequence of *Monſieur Andrij* being called upon to take the charge of the *Hoſpice des En-*

* The midwife is reported to have ſaid, that this infant though born alive, felt as intenſely cold and rigid when it came into the world as a piece of ice.—How this might be, I leave to the *Academy* of the *Curious* to determine.

fans trouvès at *Paris*. The difeafe indeed, had been often feen both in that hofpital and the *Hôtel Dieu*, but having always proved fatal, little attention had been for a long time paid to it, till Dr. *Andrij* was elected phyfician to the firft mentioned charity; fince which time, no pains feem to have been fpared in the inveftigation of it: and the fubject having fince been taken up by the Royal Society of Medicine, it is hoped additional light will be thrown upon it, if the diftracted ftate of affairs in that kingdom can admit of the calm confideration of fuch fubjects.

That the prefent account of the difeafe may be clearly ftated, I fhall firft confider it as it has appeared in this country, in the manner I had long ago intended, and had actually drawn up before I was favoured with fome further defcription of it, by Dr. *Andrij*.

It has, indeed, been much lefs common in this kingdom than on the continent, but is equally an hofpital difeafe, and feldom met with but accompanied with fome bowel complaint, and ftill more rarely appearing at the birth. It was firft fpoken of in public, I believe, by my friend Dr. DENMAN when a teacher in midwifery, and phyfician to the *Middlefex* hofpital; whofe unwearied attention to it there, though not with all the defired effect, does him more

honour than could have been derived from the moſt ſucceſsful treatment of a diſeaſe leſs fatal than this has proved wherever it has appeared.

The *Britiſh Lying-in hoſpital* has been very little infeſted with it, and, poſſibly, by being ſolely appropriated to the reception of pregnant woman, which the *Middleſex* is not; the air of which may on that account be leſs pure and ſalutary.

The following Symptoms (Dr. DENMAN obſerves) "have been conſidered as pathognomonic, or characterſtic of the diſeaſe.

1ſt. The ſkin is always of a yellowiſh white colour, giving the idea of ſoft wax.

2d. The feel of the ſkin and fleſh is hard and reſiſting, but not edematoſe.*

3d. The cellular membrane is fixed in ſuch a manner that the ſkin will not ſlide over the ſubjacent muſcles; not even on the back of the hands, where it is uſually very looſe and pliable.

4th. This ſtricture often extends over the whole body; but the ſkin is peculiarly rigid in the parts about the face, and on the extremities.

5th. The child is always cold.

* To me the appearance and feel of the ſkin have exactly reſembled that of a perſon who has died during a very hard froſt.

6th. The infant makes a peculiar kind of moaning noiſe, which is often very feeble; and never cries like other children.

7th. Whatever number of days ſuch children may ſurvive, they always have the appearance of being dying."

This diſeaſe commences at no regular period; but whenever it takes place it attacks ſeveral infants within a ſhort time; and chiefly thoſe who may be in the laſt ſtage of obſtinate bowel complaints, in which the ſtools are of a waxey or clayey conſiſtence. It has been alſo remarked, that it ſometimes makes its appearance as an *original* diſeaſe, and in that caſe more frequently, I think, within the firſt ten days after birth: a few children have even been born with it, and ſuch have never ſurvived many days.

I have ſeen the rigidity extending beyond the cellular membrane, ſo as to effect the muſcles, but only thoſe of the lower jaw, which became perfectly rigid: but this ſpaſm or tetanus does not ſeem to be a frequent ſymptom, nor do convulſions extend to the extremities, as they are found to do in *France*; nor have I diſcovered any extravaſation in the cellular membrane after death, reported to be conſtantly met with in that country. Moreover, in no inſtance that I have heard of, has the diſeaſe been attended

with the eryſipelatous affections uniformly noticed there.

The cauſe of this dreadful complaint, when either congenite, or evidently ſupervenient to diſorders of the firſt-paſſages, ſeems to me to be a ſpaſm depending very much upon a certain morbid ſtate of thoſe parts, and with which the ſkin is well known to have a peculiar ſympathy. But when, though an original diſeaſe, it does not take place till ſome days after birth, which, I believe, is rarely the caſe except in large hoſpitals, and other crouded apartments; the irritating cauſe, in ſuch inſtances, is probably ſeated in the ſebaceous glands, and the diſeaſe ſeems to be an endemic of certain ſeaſons, ariſing from that unwholeſome air to which ſuch places are peculiarly liable.

The means of CURE in this country, (where it has been ſaid, the diſorder is more ſimple,) have been different from thoſe that have lately been found ſucceſsful in *France*; but inſtances of recovery have been very few in either. When the diſorder was firſt noticed, its treatment was confined to a ſtrict attention to the ſtate of the bowels, and rendering the ſeveral medicines very warm by means of the compound ſpirit of ammonia, which was adminiſtered every four or ſix hours; and was the only plan attended with

any ſucceſs. Together with this, I after ſome time directed the frequent uſe of a warm-bath, and chafing the whole body afterwards with warm flannel; means which have ſince appeared to have been attended with the firſt inſtances of ſucceſs in *France*, as will be noticed below.

As the diſeaſe raging ſo much in *France* differs in many reſpects from ours, it is very doubtful how far the plan of cure adopted there may by applicable in this country, and my own experience has hitherto not gone beyond the means I have mentioned: but I would venture to ſuggeſt, that in many caſes, trial might be ſafely and properly made not only of carminative clyſters, but alſo of a grain of calomel previous to the infant being put into a vapor-bath; and after a ſufficient number of ſtools ſhall have been procured by theſe means, exhibiting other volatile and cordial remedies beſide the ſpirit of ammonia; as well as antiſpaſmodics of different kinds.

After the deſcription given of this diſorder as it appears in *London*, little more will be neceſſary, I apprehend, than to ſelect the circumſtances in which, it has been noticed, *that* in *France* is found to differ.

It has already been ſaid, that it is more frequently attended with tetanus, and never occurs

without thoſe appearances mentioned under the article Eryſipelas infantile, eſpecially the redneſs and hardneſs about the pubes, accompanied further with tumour and redneſs of the ſoles of the feet. But theſe parts, it ſeems, though of a purple red, are intenſely cold; very rarely ſuppurate; but ſometimes mortify.* In one very late inſtance, however, the infant was not cold,† but on the contrary, exceedingly hot. The legs, thighs, and ſoles of the feet were red and hard; but no mention being made of a *general* tightneſs of the ſkin, it is probable this child was affected only with the infantile eryſipelas which appears amongſt us.

Beſides the above variations, the infants are ſaid to ſwallow with extreme pain; the extremities, eſpecially the legs, are much enlarged, and attended with a ſerous effuſion in the cellular membrane, which we have not hitherto noticed:

* This is ſaid to be the caſe in four or five children out of twenty, all of whom are found to die in a few hours after the gangrene has taken place; and become ſo putrid, that by the next day, the ſkin ſeparates from every part of the body, ſo as to adhere to the hands of thoſe who have occaſion to touch them.

† One inſtance of this kind alſo occurred at the Britiſh Lying-in-Hoſpital; and in this caſe there was likewiſe tumour, hardneſs, and redneſs about the pubes, and different parts of the extremities.

and the diſorder is ſaid to rage moſt in the hotter months. One inſtance, however, of difficulty of ſwallowing, fell under my notice; the child, at leaſt, refuſed the breaſt, and ſwallowed unwillingly whatever was offered it: but this infant ſcarcely ſurvived the attack fifteen hours.—In *France*, it is further obſerved, that the infants die about the third or fourth day, or at furtheſt, on the ſeventh from the birth. It is probable, there is another and very material variation, in reſpect to the degree of ſtricture and immobility of the ſkin, which are not clearly expreſſed to be either ſo conſiderable or extenſive, as in the diſeaſe I have been deſcribing; but are more confined to thoſe parts which become red and tumid. But in the inſtance recorded by SCURINGIUS it was clearly otherwiſe, the infant being ſaid to feel, from head to foot, like a piece of fleſh dried in the ſmoke. This child ſurvived a complete day, during which time it took no ſort of nouriſhment, and never cried, nor made any kind of noiſe.

Upon examining a great number of dead bodies at the *Enfans Trouvés*, the ſerous extravaſation is conſtantly met with; is of a deep yellow colour and fluid, but coagulates with heat; the fat is peculiarly ſolid; the glands and lymphatics, eſpecially thoſe of the meſentery, are

found ſtuffed, and the liver uncommonly large, with a great quantity of deep coloured bile in the gall-bladder; and the lungs are ſaid to be loaded with blood, as well as to contain an unuſual quantity of air.

The ſuppoſed CAUSE of this diſeaſe amongſt them ſeems to me but ill accounted for; the complaint being attributed to the improper diet of the mother or her infant; or to cold it has taken at the birth: whereas, the coldneſs and rigidity of the ſkin ſeem to be but mere ſymptoms, and not the diſeaſe; eſpecially as their children, like ours, are but rarely attacked from the birth. The diſeaſe appears to be a true endemic, ariſing from foul air, eſpecially as it is found only to attack the poor, and particularly to infeſt the two large hoſpitals that are crouded above all others, and receive the loweſt and moſt wretched part of them; of whoſe new-born children, it is ſuppoſed, one out of twenty is viſited with this diſeaſe.

It has been hinted, that for a long while, little attention was paid to this complaint, on account of its conſtant fatality, ſix hundred infants ſinking under it every year, in a ſingle hoſpital; about four hundred of which are born in the *Hôtel-Dieu.*

But ſince Dr. *Andrij's* election to the *Hoſpice des Infans trouvés*, various means have been attempted both by himſelf and his colleague, Mr. AUVETY; and amongſt other means, the warm-bath, which appears to have ſaved the firſt child that was known to recover. Trial has ſince been made of bliſters to the extremities, which ſucceeded alſo in the very firſt inſtance, as well as ſince in ſeveral others; ſo that, in the laſt year, they are reported to have ſaved five infants out of every hundred, more than in the preceding one.

Monſieur SOUVILLE, ſurgeon to the *Military Hoſpital* at *Calais*, has alſo given ſome account of this diſeaſe, in the *Journal de Médicine*, under the name of *Ædématie Concrète*, and obſerves, that it is a very common diſorder in the Provinces, as well as in *Paris*. Under his direction, likewiſe, a warm, or rather vapor-bath, ſucceeded in the only inſtance wherein he had made trial of it.

And this part of the treatment agrees with the account of the *Neapolitan* girl to which I have alluded, as well as with the reſult of our further experience at the *Britiſh Lying-in-hoſpital* where the warm-bath, in one inſtance, was thought to haſten the death of the infant.

The former was read before the Royal Society, *May* 16th 1754. The diſeaſe was in this young woman exceedingly ſevere, the ſkin being ſo very rigid over the whole body, from head to foot, that ſhe could ſcarcely move her eye-lids, or open her mouth; nor could ſhe move any of her limbs without pain, as well as difficulty, though the rigidity was evidently in the ſkin and adipoſe membrane, and not in the muſcles.

It may be ſufficient to ſay, that the patient recovered, but not under a twelvemonth. The means had recourſe to were the warm, and vapor-bath, mercury, ſarſaparilla, and friction of the ſkin.

The warm-bath gave her great pain (as it was ſuppoſed, from the weight of the fluid) that after a few trials, ſhe fell into convulſions, through her dread of it, as they were about to put her into it. But the warm-vapor very ſoon afforded relief by relaxing the ſkin, but very little, or no perſpiration was produced; nor had ſhe ever had the leaſt from the commencement of the diſeaſe; but it was after the vapor-bath conſiderably promoted by the internal exhibition of twelve grains of quickſilver every day, with a decoction of ſarſaparilla, aſſiſted by conſtant warm-air, and frictions of the limbs.

How far any part, or the whole of this treatment may be succefsful in infants, to whom the complaint feems to be confined in this country, experience only can prove; but it is prefumed, that the means are worthy of trial.

TETANUS, *or* LOCKED-JAW.

THE TETANUS,* of infants, is an equally fatal complaint, and in this country nearly as little known as the foregoing. It is either idiopathic or fymptomatic; which diftinction is of more importance in hot climates, where the latter is always found to be incurable. In fome inftances it has been confined to the jaw only, as in *Jamaica*; in others, it has been attended with contraction and rigidity of other mufcles of the face, and a peculiar fixednefs of its features. Sometimes, the rigidity has extended to the neck; and in one child I obferved it to be fpread fo completely over the whole body, that the limbs could not be bent fo as to place it advantageoufly in a veffel, fomewhat too fmall, appropriated to a warm bath. It has already been

* This is the fpecies which Nofologifts have termed *Trifmus maxillæ inferioris Rigiditas fpaftica.* Species 1ma. *Trifmus Nafcentium infantes intra duas primas a nativitate feptimanas corripiens.* Vide CULLEN. G. LXIX.

obſerved that it is ſometimes joined with the foregoing complaint, but rarely in this country; and even then, the jaw partakes only of that kind of rigidity common to other parts.

In ſuch inſtances of *Tetanus* as I have met with, the attack has not been earlier than the ſixth, nor later than the ninth day from the birth,* (excepting one inſtance, early on the tenth;) and as far as I could learn, the infants had not been coſtive, (which Dr. EVANS reports to be uſually the caſe in *Jamaica*) nor apparently unhealthy: ſome, I remember, were remarkably ſtrong and luſty children. It ſeems ſomewhat to differ, therefore, from the diſeaſe termed *Jaw-fallen*, in the *Weſt-Indies*; and in one inſtance appeared to have ſome reſemblance to the catalepſy. The rigidity has ſtolen on in a more gradual way in ſome inſtances than in others, but has always been very great as far as it extended, from the moment it has been diſcovered; ſo that in inſtances where the mouth has continued ſufficiently open to admit my finger, I could not thereby depreſs the jaw. In ſome, the

* In the *Weſt-Indies* alſo never later than the ninth day.—(Dr. *James Clark.*) In *France*, however, it is ſaid to attack much older children, though rarely after two years of age. *Memoire de la Societè Royale de Medicine*, Ann. 1787 and 8.

eyes have been bloated, and the whole countenance much ſwollen.

The CAUSE of this complaint has been differently conceived of. Dr. EVANS, who has been very converſant with it, attributes it to coſtiveneſs, and thinks he has greatly prevented its frequency amongſt the negroe infants, by purging them from the birth. Dr. BARTRAM of *Philadelphia** attributes this fatal diſeaſe to a want of ſwathing, or proper bandage to new-born infants, and to the application of ſcorched linen to the navel; but his reaſoning, to ſay the leaſt of it, appears to be very inconcluſive. It has alſo been attributed to the cord being divided by inſtruments not ſufficiently ſharp. But the cauſe has at length been clearly aſcertained, and happily its prevention, by Dr. JAMES CLARK,† who perceiving that thoſe houſes were free from this diſeaſe, in which there were no fires, very ſoon demonſtrated it to be owing to the ſmoke from burning wood; the negroe-houſes having no chimneys to carry it off.

It does not in this country ſeem to ariſe from conſtipation, or neglect of purging off the meconium, and much leſs for want of ſwathing,

* See the *Tranſactions* of the *College of Phyſicians* at *Philadelphia.*

† See his Treatiſe on the Yellow-Fever, &c. 1797.

but is owing, as I have always ſtated, and has ſince been demonſtrated, as above remarked) to a certain ſtate of the air; and the more ſo, as the diſeaſe appeared only once in the *Britiſh Lying-in hoſpital* during a great number of years, and then attacked ſeveral infants in a ſhort time.—It has appeared again, however, in four inſtances ſince the above account of it was given in former editions.

The remedies attempted at the hoſpital were, the warm-bath; fomentations to the rigid parts; frictions with oil and camphire, and BATES's anodyne balſam; bliſters behind the ears, and to the nape of the neck: an aſafœtida, opium, calomel, the bark, and aromatic confection, have been given internally. It remains, however, to make trial of more cordial and tonic remedies as recommended by phyſicians in *North-America*, where the diſeaſe is more common than it is here; ſuch are the oleum ſuccini, muſk, wine, and the cold bath: though concerning the latter, writers differ, Dr. CLARK aſſerting, that it has in no inſtance ſucceeded.

One infant, in whom the complaint was confined to the jaw, and who had leſs rigidity than any of the others, never looked ill, and had no convulſions it its limbs, died rather ſooner than the reſt, excepting the one attacked ſo late as

the tenth day, which was a remarkably large and healthy infant: this child after being five minutes in a tepid bath, of ſalt and water, fell into a more profuſe ſweat than I had ever noticed in any young infant, and died in a few hours afterwards, and only twenty-four from the attack. I have known only one child ſurvive the third day, and that was not ſeized till the ninth from its birth, and at the end of the third week ſeemed to be recovering; but it had never been able to take the breaſt after the attack, and died when ſix weeks old, though, poſſibly, not altogether from this complaint.

EPILEPTIC-FITS.

THIS and ſome of the following complaints, as well as the two or three immediately preceding, which relate, ſome to the more early, and the others to later periods of childhood, are noticed ſucceſſively in this place on account of their falling under the general claſs of convulſions; and it is preſumed leſs improperly, on the whole, than ranking them according to the different periods of time in which they might take place.

Very few words, however, on the Epilepſy may ſuffice, as it is either pretty eaſily cured, or

uſually continues through life; and is too well known to require a particular deſcription. An account of the various precurrent ſymptoms would be equally uſeleſs.—It may juſt be noticed, that the patient falls ſuddenly to the ground, and ſometimes without any perceptible warning, or at all ſufficient to ſecure him from injury; and is uſually much convulſed, eſpecially on coming out of the fit, but frequently retains his ſenſes the whole time.

I believe it ſometimes takes its riſe merely from foul bowels; and certainly more commonly attacks children of a coſtive habit of body; it ſhould then be treated agreeably to the directions already given in ſuch caſes, and eſpecially with active and mercurial purges: after which, the cortex peruv. vitriolum album, chalybeates, and ſea-bathing may be ſerviceable. In other inſtances, eſpecially in more advanced life, and towards the time of puberty, the epilepſy ſeems to be owing rather to a more ſenſibly nervous irritation. In ſuch caſes, bliſters to the back of the neck may be uſeful; and I have experienced much benefit from large doſes of the powder of valerian, and opium; and in one inſtance, from an infuſion of ſavine, fennel ſeeds, and juniper berries; but I could never

entirely conquer the complaint by these means; but the oleum succini has, in several instances, perfected a cure in young subjects; and where that has failed, I have succeeded with musk.

In the worst cases I ever met with, in which the fits were very long and violent, and sometimes to the number of twenty or thirty in a day, and the disorder of some years standing, electricity has very soon rendered them weaker, reduced their number to three or four in a day, and gradually to one in six weeks; but did not entirely remove them. In such obstinate cases, it is generally supposed, that the brain is affected by some local or permanent cause, and a perfect cure is consequently despaired of; though I have known the fits abate greatly after having continued for twenty years, and the subject of them afterwards become the mother of several children. But parturition, as well as whatevever else may tend to debilitate the system, I have always found increase the number of the fits.

When this disease has attacked children of five or six years of age, and where no treatment has been serviceable, the complaint has very frequently disappeared suddenly about the time of puberty, and sometimes a year or two

ſooner. Where it does not, it will probably continue through life, and now and then prove ſuddenly fatal, as I have ſeen in a late inſtance.

Dr. JOHN WILSON of *Spalding*, has lately ſtrongly recommended the internal uſe of the argentum nitratrum, in doſes of gr. ijß, three times a day. And in the *Medical and Chirurgical Journal*, edited by Profeſſor HUFELAND, is an account of a cure effected in a caſe of three years ſtanding, by the cuprum ammoniacum given in the doſe of half a grain a day, and increaſed to five grains daily.

Upon examining the brain after death, I have ſometimes found water in the ventricles, and at others, a ſmall point of bone as ſharp as a needle ſtanding out from the internal part of the os frontis, or from the cella turſica, (of which BOERHAAVE and others have recorded ſeveral inſtances) and was, doubtleſs, the true cauſe of the diſeaſe.

CHOREA SANCTI VITI, *or* SAINT VITUS'S DANCE.

I Shall be very brief alſo on this untoward diſorder, which is equally well known, and though not often fatal, is like the former, I believe, rarely cured but in young ſubjects.

Worms, and other foulneſs of the bowels in children, are likewiſe frequent cauſes of this ſtrange convulſion; in which different parts, and eſpecially the extremities are put into continual motion, giving the patient a very awkward appearance, particularly in his walk.

If the firſt-paſſages are the ſeat of irritation, the complaint muſt be treated in the manner noticed under the preceding article; and, indeed, in moſt caſes, the cure ſhould be begun by adminiſtering aloetic, or mercurial purges. But ſhould the diſorder appear to be owing rather to relaxation, as it ſometimes is, the cortex peruvianus, chalybeates, and other tonics, eſpecially the vitriolum album, and ſea-bathing, are indicated, and are very frequently ſucceſsful. I have alſo known it immediately yield to electricity; but in this caſe, it has been attended with other ſymptoms of palſy, which have come on ſuddenly. Electricity, however, has lately been very uſeful in a very extraordinary inſtance; but the complaint returning, yielded afterwards to a perpetual bliſter, on the os ſacrum, directed by Dr. Delarive of the *Public Diſpenſary.* The pilulæ cupri were adminiſtered at the ſame time, in the doſe of gr ß; but no benefit was perceived till the bliſter was applied. Dry-cupping has alſo been thought uſeful.

APHONIA SPASMODICA INTERMITTENS, *or* TEMPORARY LOSS *of* SPEECH.

THIS complaint when it occurs in children, though it is not a common one, takes place between the fourth and ſeventh year of their age; is only a tranſient loſs of ſpeech, and is a harmleſs affection: for though it may recur for a length of time, I believe it never degenerates into a permanent diſeaſe. It is rather a difficulty in articulating, than a perfect loſs of ſpeech; laſts only for a few minutes, or at moſt, a quarter of an hour, and recurs frequently in the courſe of a day. It is thought to be ſomewhat of the nature of the chorea ſancti viti, and to be occaſioned by worms, or other irritation in the bowels; and ſometimes by teething.

If neither the irruption of teeth, nor the exhibition of mercurial purges, and other remedies for worms ſhould produce a ſpeedy good effect, any advantage from other medicines is more doubtful; but the long uſe of the cold-bath, or perhaps time only, whereby a child may acquire more ſtrength, uſually removes the complaint. It may be proper, however, to make trial of local application of a ſtimulating kind during the paroxyſm, or fit; of which remedies, the

moſt innocent is a lump of ſugar wetted with lavender drops, and amongſt the ſtronger, a decoction of the pellitory of Spain. Should theſe little remedies do nothing, and the complaint anywiſe increaſe, it appears to me, that electricity may be had recourſe to with ſafety and propriety; but the diſorder is too rarely met with to have furniſhed the opportunity of ſpeaking from experience.

INCUBUS, *or* NIGHT-MARE.

IT will be ſufficient barely to notice this affection, it being generally well known I believe, and requiring very little to be done for it; children either outgrowing the complaint altogether, or any occaſional return of it, when older, being eſteemed rather as conſtituting an unpleaſant moment, than a diſeaſe requiring medical treatment.

The incubus, probably, ariſes from a ſpaſmodic conſtriction of the diaphragm and muſcles of the cheſt, taking place during ſleep, and occaſions a ſenſe and dread of ſuffocation, and of ſome huge weight lying acroſs the breaſt. When children, who happen to ſleep with a bed-fellow, awake under the paroxyſm, they are wont

to ſay that their companion has lain with all his weight for a long time acroſs them.

The cauſe of this complaint ſeems to be flatulency in the ſtomach, and indigeſtion, and chiefly attacks children or young people of a delicate habit, and ſuch as eat too freely of fruits, and eſpecially ſuch as are unripe; or who are in the habit of eating much ſupper, a ſhort time before going to reſt.

The paroxyſms are of different duration, ſome children lying a much longer time in this unpleaſant ſtate than others; but in all, ſome degree of palpitation of the heart, lightneſs of the head, tremor, anxiety, or laſſitude remains for ſome time afterwards.

The curative indications are to rouſe and fortify. During the fit, volatiles and fetids may be applied to the noſtrils; and as ſoon as may be, ſome antiſpaſmodic ſhould be adminiſtered internally. Afterwards, clyſters, bitter purges, or emetics ſhould be exhibited, as the ſtate of the firſt-paſſages may indicate, and the cordial volatile medicines be continued. To theſe ſhould be added proper ſtomachics, aſſiſted by a nutricious diet of eaſy digeſtion, and cold-bathing, if not otherwiſe improper.

SINGULTUS, *or* HICCOUGH.

THIS has been ranked among children's diſeaſes, but it is, by no means, a complaint of conſequence, as it ſometimes is in adults, though it is, indeed, a true convulſion; and may, therefore, be noticed in this place. It occurs pretty commonly, indeed, in infancy, but ſeldom requires much attention, as it frequently comes on only after over-feeding; or in conſequence of the over thickneſs, or ſweetneſs of the food, and is one of their moſt harmleſs conſequences; it offers another argument, however, for their prohibition. But when it depends on an acid ſtate of the juices of the ſtomach, or occurs in long bowel complaints, it indicates a neceſſity for having recourſe to the teſtaceous powders. Should it, however, continue for a length of time, the emplaſt. ladani may be applied to the pit of the ſtomach.

The hiccough is an affection very incident alſo to more advanced childhood; but is equally harmleſs as in infants. It is well known, that it may be generally removed for the preſent, by any little circumſtance that may ſerve powerfully to divert the child's attention at the moment, in a way of ſurprize, or otherwiſe. And

it may not be amiſs to attempt it whenever the hiccough may return, in order to obviate the influence of habit, by which this affection may be increaſed. Caution only ſhould be had not to make uſe of ſuch violent means as might occaſion any conſiderable alarm, which in children of an irritable habit, who are the more common ſubjects of the hiccough, might induce ſome greater evil than the one intended to be removed. A leſs known, and pretty certain remedy, is a ſmall quantity of any powerful acid; lemon-juice generally anſwers very well; but a tea-ſpoonful of vinegar ſeldom or never fails in the accidental hiccough of youth, or of very old people.

STERNUTATIO, *or* SNEEZING.

THIS has likewiſe been mentioned by ſome writers as a complaint of young children, for which RHAZES preſcribes refrigerants and anodynes; but it is certainly not a common one, and indeed, I have never met with it in the form of a diſeaſe. Should it ſo occur however, ſome one of the antiſpaſmodics, ſuch as muſk, caſtor, or camphor may probably be exhibited to advantage.

It may be occaſioned by looking too long againſt any ſtrong light, as the fire, and eſpecially the ſun, or other very luminous body. It has already been ſpoken of as a well known ſymptom of the meaſles, and of many common colds, but in neither, I believe, requires any particular attention. It is mentioned here, only, becauſe I would not paſs over a complaint that has at any time been ranked among the diſorders of children. But knowing nothing further of it myſelf, and having no idea of its being a complaint of much conſequence in this country, I have not choſen, under ſuch circumſtances, to be a mere copier from others. If violent, however, it may be further worthy of attention; when in conjunction with other cauſes, it may lead to the rupture of ſome ſmall veſſels of the noſe; which will be noticed in its place.

DENTITION, *or* TEETHING.

THE Complaints ariſing during dentition may next be conſidered, many of the foregoing being blended with it, the firſt-paſſages and the nervous ſyſtem being always more or leſs affected. The ſtate of dentition is likewiſe not unfrequently an occaſion of many complaints afterwards to be mentioned, ſuch as cough, fever,

the rickets, and even pulmonary conſumption, and maraſmus; under each of which heads, therefore, occaſional references will be made to what will be advanced under this.

The time of teething is a moſt important period of the infant ſtate, and ſubjects it to manifold complaints and dangers. Some writers, indeed, and particularly Dr. CADOGAN,* and Dr. ARMSTRONG, ſeem to think otherwiſe; and that teething is ſcarcely to be ranked amongſt the diſeaſes of infants. They have imagined that children, if otherwiſe healthy, would cut their teeth with no more danger than adults, who often cut the dentes ſapientiæ, ſo called, without any difficulty, and always without hazard: they likewiſe obſerve, that many childred get their teeth eaſily. But this argument muſt ſuppoſe the healthieſt, and beſt-nurtured children to be, in all reſpects, in the ſame circumſtances with adults, which is, by no means the caſe; as they are liable to fever, dangerous purgings, and even convulſions, from cauſes that would, in no wiſe, affect the latter: nor can they ſtand under ſome of thoſe complaints ſo long as adults, nor endure the neceſſary remedies. For the ſame reaſon, the meaſles and

* See his *Eſſay* on *Nurſing*, &c. and *Armſtrong* on the *Diſeaſes of Infants*.

ſmall-pox carry off ſuch numbers of infants, when attacked by them a little more ſeverely than common, whilſt young, and healthy adult ſubjects often ſtruggle through the moſt dangerous and complicated kinds, when properly treated from the beginning. Not to mention, that very few infants who are unhappily affected with lues venerea, recover under any treatment, whilſt adults are cured in the moſt advanced ſtages of the complaint, notwithſtanding ſome parts may be actually mortified. I have, therefore, no doubt, that the time of teething ought to be ranked amongſt the moſt hazardous to infants, and that the greateſt attention ought to be paid to it; though, it is probable on the other hand, that Dr. ARBUTHNOT over-rates its fatality, when he ſays that one child in ten may be ſuppoſed to ſink under it; at leaſt, I believe that this is not the caſe where the ſymptoms are timely attended to.

Some late writers, and particularly Mr. LE FEBURE DE VILLEBRUNE, have conceived this to be a mere diſpute about words; but the difference, indeed, extends much further. For though I would, indeed, by no means aſſert dentition itſelf to be a diſeaſe, and have made uſe of any ſuch like expreſſion merely in a popular way, yet am I confident it induces diſeaſe in very

many infants of every habit of body, and more eſpecially, however ſtrange it may ſeem, in the apparently healthy and robuſt. Indeed, weak and even rickety children commonly cut their teeth eaſily, though often very late; or if they ſhould be harraſſed by a purging, and other complaints, they, nevertheleſs, eſcape with their lives, while very luſty ſtrong children are frequently carried off ſuddenly at this period, unleſs the teeth happen to find a very eaſy paſſage through the gums. The ſyſtem, during dentition, being diſpoſed to inflammation, ſuch children much oftener fall into fever than the tender and delicate; like athletic adults, who are more diſpoſed to inflammatory complaints, than thoſe who are of a colder, but leſs healthy temperament: and it is by acute fever, or convulſions, that infants are carried off, who are well known to ſurvive a thouſand lingering and vexatious complaints, if their viſcera are ſound. It may be here obſerved, however, that convulſions more rarely take place where a fever attends.

There are alſo other circumſtances that affect the proceſs of dentition, among which the three noticed by HIPPOCRATES, I believe, are well-founded: "That infants cut their teeth more readily in winter than in ſummer; that ſuch as are rather inclined to be lean, cut them more

eaſily than thoſe that are very fat; and children who are looſe in their belly the moſt ſafely of all." RHAZES* and PRIMEROSE are of a different opinion in regard to the fitteſt ſeaſon: but of the truth of the laſt of theſe obſervations there can be no doubt.

This period uſually commences between the fifth and tenth months, and the proceſs of the firſt teething commonly continues to the ſixteenth at the leaſt, and ſometimes much longer. It almoſt invariably begins with the inciſores of the lower jaw. Uſually two of theſe are cut, and then the correſponding ones in the upper jaw. After two teeth in each jaw have appeared, it is in ſome inſtances a conſiderable time before the contiguous ones come out; but ſometimes, though not often, ſix or eight are cut in a haſty ſucceſſion. The inciſores are ſucceeded by the four molares, then the canini, and the laſt of all of an infant's firſt-teeth, their antagoniſts, or the eye-teeth; making in all ſixteen. This, it is well known, is the ordinary number of children's firſt-teeth, as they are called; but ſome infants cut four double-teeth in each jaw, inſtead of only two, making the whole number twenty:

* Apud *Sennert* de Dentit. in *Prognoſt.* Sect. 5. *Sennertus*, however, endeavours to reconcile the two opinions, Sect. 5. of the above work.

and I have very lately known an inftance of a child cutting twenty-four teeth; and what is remark-able, another infant, its near relation, appears to be at this time cutting a twenty-firft tooth, and if really fo, will likewife have twenty-four.

The above wonted order in cutting the four in-cifores appears to be owing to thofe of the lower jaw being lefs deep in the alveolar procefs, as well as thinner and fharper at their points, and there-fore likely to force their way before thofe in the upper jaw: accordingly, at leaft one of the in-cifores in the former is ufually the firft cut. The one oppofed thereto in the upper jaw fometimes appearing next, rather than the contiguous one in the lower, feems to be occafioned by the fric-tion of the prominent tooth, againft that part of the upper jaw at which its antagonift is to ap-pear. This attrition repeated every time the jaw clofes, derives a greater portion of fluids to that part, increafing its natural action, and thereby forwarding the growth of the tooth; while by the forcible and frequent preffure of the gums and periofteum againft it, as foon as it has made its way through the bone, its irruption is further affifted. If the fucceffion be otherwife, and a fecond tooth in the lower jaw be cut before one appears in the upper, as for the reafon already given is more commonly the cafe, it is not un-

frequently before many days; and the two corresponding teeth, in that caſe, either follow in two or three weeks, in conſequence of attrition, or elſe do not appear for ſome months: but whatever the period may be, they generally come forward before any more teeth are cut in the under jaw. It is uſually ſome weeks, it has been remarked, before the other two front-teeth in the lower jaw are cut, and in a week or two afterwards, if there be no conſtitutional impediment, the correſponding ones in the upper jaw are commonly puſhed forward, and for the reaſons given for the early appearance of the antagoniſts to the two firſt cut teeth.

In children who are ſtrong and healthy, this proceſs goes on pretty much as above deſcribed, and the teeth are cut both eaſily and ſoon; but in unhealthy and weakly infants the proceſs is both ſlow and uncertain. Accordingly children ſometimes cut their teeth irregularly, or croſs, as it is called, both by the teeth appearing firſt in the upper jaw, and alſo at a diſtance, inſtead of being contiguous to each other: this is accounted, and with ſome reaſon, an indication of difficult, or painful dentition. It may alſo be remarked, that the eaſe or difficulty of dentition may be gueſſed at, by the circumſtances under which the two firſt teeth ſhall happen to be cut;

the ſucceeding ones frequently making their way in a correſpondent manner.

Teething is uſually preceded and accompanied with various ſymptoms: the child drivels; the gums ſwell, ſpread, and become hot; there is often a circumſcribed redneſs in the cheeks, and eruptions on the ſkin, eſpecially on the face and ſcalp; a looſeneſs, gripings; green, or pale ſtools, or of a leaden-blue colour, ſometimes mucous, often thick and paſtey; watchings, ſtartings in the ſleep, and ſpaſms of particular parts; a diminution or increaſed ſecretion of the urine, ſometimes of a milky colour, at others, ſtaining the cloths in patches, as if it depoſited a brown powder; a diſcharge of matter, with pain in making water, (imitating exactly a virulent gonorrhœa) which often mitigates the fever: in almoſt all caſes, the child ſhrieks often, and thruſts its fingers into its mouth. A ſymptom leſs common than any of the foregoing, and appearing only in certain habits, is a ſwelling of the tops of the feet and hands: it ſeems, however, to be of no importance, and goes away upon the appearance of the teeth. I never met with it but in infants who cut them painfully; and being ſeldom accompanied with a purging, it is likely may (in its ſtead) prevent that fever which is otherwiſe ſo apt to attend. In ſome inſtances,

however, this ſymptom has been accompanied with conſiderable fever, but in ſuch, children have either been coſtive, or the ſtools been fetid and clayey, and the ſwelling of the extremities very conſiderable. I have likewiſe, in a few inſtances met with a tranſient palſy of the arms or legs, which in one infant recurred as often as teeth were making their way. The above-mentioned ſymptoms are often followed by a cough, difficult breathing, fits, fever, ſcrofula, and maraſmus; and ſometimes by hydrocephalus.

Strong and healthy children, it has been obſerved, cut their teeth earlier than the weak and tender, but are more ſubject to fever. I have known a weak and rickety child, without a tooth at twenty-two months old,* though it lived to grow up; but at the age of five years became ſcrofulous. The fact, I believe, is, that the extremes of high health and of debility are both dangerous; the one being expoſed to acute fever, or convulſions, the other to a ſlow hectic and maraſmus. Therefore air, exerciſe, wholeſome food, an open belly, and every thing that has a tendency to promote general health, and to guard againſt fever, will greatly contribute to

* PRIMEROSE ſpeaks of it being as late as the third, or even fourth year.

the ſafety of dentition, and to children paſſing quickly through this hazardous period.

Difficult teething is to be treated nearly as other acute diſeaſes with local inflammation. If the body is at all bound, ſome opening medicine ſhould be adminiſtered, and it has been obſerved, that even a conſiderable degree of looſeneſs is uſeful. Diluting drinks are likewiſe very neceſſary, eſpecially if the child does not ſuck; alſo a light food, in ſmall quantities, and taken frequently. If much fever attends, the loſs of a little blood, in ſome way, will be neceſſary; though children do not endure bleeding ſo well as they do other evacuations. If the propriety of bleeding with the lancet be doubted, a leech or two, as HARRIS adviſes, may be applied behind the ears, and is generally ſerviceable. Clyſters are alſo very uſeful, eſpecially if there be retention of urine, which will likewiſe call for the uſe of the warm-bath. Gentle diaphoretics are alſo ſerviceable, particularly vinum antimonii, or the antimonium tartariſatum, which beſides opening the belly, often operate in this way: a bliſter ſhould likewiſe be applied between the ſhoulders, eſpecially if there be any diſpoſition to fits. And, indeed, if ſtools do not afford ſome conſiderable relief, there ſhould generally be ſome diſcharge from

the ſkin; ſince a purging, and eruptions on the ſkin, when ſpontaneous, are the grand means of eaſy dentition. A little diſcharge ſhould, therefore be kept up behind the ears, by rubbing the parts with Spaniſh flies, applying a thread as before directed, or putting on a ſmall bliſter, which may be kept open. A Burgundy pitch plaiſter laid on the back will ſometimes ſuffice, which ſhould be renewed every ten days, till the ſymptoms diſappear, or the teeth come into ſight. Even before this period, ſlight ſcarifications of the gums are very uſeful, by taking off the tenſion; or if the teeth are at all to be felt, lancing them.

I ſhall cloſe what I have to offer on the general plan of treatment, by obſerving, that the indications certainly are to aſſiſt the irruption of the teeth, and to moderate the inflammatory and other ſymptoms; which muſt be treated according to their kind: all parts of the body readily conſenting with the gums at the time of teething, but the nerves, the bowels, and lungs, more particularly and importantly than the reſt. It has been obſerved, that a purging is beneficial, and it is, indeed, ſurpriſing how conſiderable a diarrhœa children will ſtand on this occaſion, and how very bad the ſtools will often be for many weeks together, and a child happily ſtruggle through; though at another time, an equal de-

gree of purging, with ſuch bad ſtools, and con-ſtant fever, would prove infallibly fatal. The di-arrhœa is therefore, not only to be cautiouſly treated according to the directions already given under the article of purging, but is oftentimes rather to be encouraged than ſuppreſſed. Very pale ſtools have been ſaid to be not uncommon at this time, and are ſometimes in vaſt quantity: I have known an infant have fifty in one night, at leaſt by the account of a careful and diſcreet nurſery-maid; and from the quantity of feces that I ſaw the next morning, I had no reaſon to diſpute it.

For the fever of dentition, beſides bleeding, the abſorbent powders are eminently uſeful, and are, in various reſpects, calculated to afford relief. To theſe, ſometimes a grain or two of Dr. JAMES's powder may be added at bed-time. Nitre is very often uſeful, joined with the teſtaceous powders, or the pulvis è contray-erva comp. SYDENHAM directs the compound ſpirit of ammonia in a ſpoonful of water every four hours, for four or five times, and I have thought it very ſerviceable after proper evacua-tions. Nor is a drop or two of laudanum to be feared, if the bowels have been previouſly opened, the pain be very great, and the breathing not difficult.

A free difcharge from the bowels, however, muft above all be preferved, when children cut their teeth with fever. The ftate of their gums muft alfo be carefully attended to, or their fevers will be miftaken, and attributed to cold, or other caufes, when the fource of irritation is wholly in the gums.

The lungs, it has been faid, is one of thofe parts on which the irritation from teething is apt to fall, and when fixed there, the fymptoms bear an alarming afpect. A precife acquaintance with their true caufe is therefore of the greateft importance; or for the want of it an unfuccefsful plan of cure will be adopted. I fpeak this from much experience, having known good phyficians overlook the true caufe of the inflammatory fymptoms; efpecially when children have cut the ufual number of firft-teeth.

In fuch cafes, I have met with the moft alarming peripneumonic fymptoms; forenefs of the cheft, cough, and great difficulty of breathing, with lofs of appetite, continual fever, and the appearance of general decay. In this ftate, purging the bowels, and properly lancing all the fufpected teeth, has given immediate relief; and by keeping up the purging for three or four days, every threatening fymptom has fo throughly fubfided, that in a fortnight's time, a child ex-

pected from day to day to die of inflammation, or fall into marafmus, has been reftored to its former health and fpirits.

A principal indication, it has been faid, is to affift the eruption of the teeth. This is attempted by cooling, fedative, and demulcent applications made to the gums; by rubbing them with fome hard polifhed body, fuch as the coral, or by dividing them with the lancet: which laft is the only means to be depended upon. Rubbing the gums, however, I apprehend, not only fomewhat appeafes pain, as adults fometimes experience in the common tooth-ach, but it alfo forwards the growth of the teeth, by drawing more nourifhment to them; as well as affifts their irruption, by preffing the gum and periofteum firmly againft their points. Suitable application on this occafion may be, either mel. com. or fyr. papaver. albi; or the honey may be lightly acidulated with the acid. vitriolic dilut. Befides the coral, a cruft of bread, or a piece of liquorice-root may be often carried to the mouth, and may fometimes be preferable, as they will yield a little to the preffure of the gums.

Thefe means, neverthelefs, and efpecially the coral, have been objected to by fome modern refiners; but the objections are certainly groundlefs, as in giving this direction we are only fol-

lowing nature. For the young of all animals who ſuck as ſoon as the teeth begin to ſhoot are always ſtrongly inclined to gnaw ſuch things as afford a little reſiſtance. This may be every day obſerved in domeſtic animals; to prevent which in puppies, recourſe is had to a ridiculous operation of worming, as it is called, which rendering the mouth a little ſore, may prevent them for a time from gnawing every thing that comes in their way: and if their gums become eaſy, or teeth are cut the meanwhile, they have no longer any deſire for it, but what ariſes from the playfulneſs of youth.

When it is found neceſſary to lance the gums, (which is ever, at leaſt, a ſafe operation,) it ſhould be always done effectually, with a proper gum-lancet; that both the gum, and the ſtrong membrane that covers the teeth may be ſufficiently divided. The lancet ſhould always be carried quite down to them, and even drawn acroſs the double teeth. It is certain, that this little operation gives ſcarcely any pain, and the relief is at the ſame time often ſo conſiderable that the child appears exceedingly pleaſed with it, and will immediately afterwards ſqueeze the jaws and grind them together forcibly; which proves that the gums are not very ſenſible.

The moſt painful part of dentition, and that in which children are moſt expoſed to convulſions, is uſually from the teeth cutting through the perioſteum. This, I apprehend, in difficult dentition is often not cut through, but is forced up before the teeth, when they are even in ſight under the thin gum; hence it is, that cutting through the gum is ſo very often uſeful, and takes off fever and convulſions, which ſevere ſymptoms could not ariſe merely from teeth piercing the gum, which it has been ſaid is not a very ſenſible part. At other times, the pain and fever ſeem to ariſe from almoſt the very firſt ſhooting of the teeth within the jaw, and then they will very often not appear for ſome weeks after the gums have been properly lanced; and parents are therefore apt to conclude, the lancing has been unneceſſary, if not improper. I am, however, convinced from experience, that this little operation, though not in the general eſteem it ought to be, (and by the *French* phyſicians perfectly dreaded even in this day),* is often inexpreſſibly uſeful, and appears to have ſaved many lives, after the moſt dangerous ſymptoms had taken place, and every other mean of cure had been made uſe of. The mere bleeding from the gums is capable of affording

* See *Lieutaud.*

ſome relief, as it is frequently found to do in adult perſons diſtreſſed with the tooth-ach. And I cannot here forbear expreſſing my ſurprize at the fears ſome people entertain of lancing the gums, and their delaying it ſo long, if not altogether rejecting it, though no evil can poſſibly ariſe from the operation. On the other hand, its advantages are ſo great, that whenever convulſions take place about the uſual period of dentition, recourſe ought always to be had to it, after an unſucceſsful uſe of other means, though by an examination of the gums there may be no certain evidence of the convulſions being owing to ſuch cauſe; the irritation from teething, it has been remarked, ſometimes taking place in a very early ſtage of the buſineſs. At any rate, (it is repeated) the operation can do no harm, even at any period, and ſhould the ſhooting of teeth be only an aggravation to the true cauſe of the diſeaſe, lancing the gums muſt be attended with advantage. But ſhould teething be the proper and ſole cauſe, it is evident how fruitleſs any other mean of relief muſt frequently be: for ſhould convulſions, for inſtance, take place from a thorn run into the finger, or toe, the proper indication of cure, by an immediate extraction of the thorn, and the probable futility of other means, would be equally obvious.

The operation may alſo be ſafely repeated,* the ſcars doing no kind of harm. This, however contrary to popular prejudice, may be very evident, not only from the fact of infants cutting their firſt teeth very eaſily ſome weeks after being lanced, but alſo from the circumſtances under which the ſecond teeth are often cut. At this period, children from their more advanced age, and decreaſed irritability, are leſs ſubject to fever, and evidently appear to ſuffer far leſs pain, than in the firſt teething, though the ſecond teeth often have to make their way through much more conſiderable ſcars than have been made by a lancet, from the gums having been lanced prematurely. This fact is likewiſe eſtabliſhed from the many inſtances in which dentiſts have thought it expedient to draw out the firſt teeth long before the ſecond are prepared to take their place.† The objection to lancing the gums from any apprehenſion ariſing from the ſcars, is, therefore, altogether ill-founded; and indeed, it will be

* See page 154.

† This practice is, by no means, adduced in a way of approbation, but merely for the ſake of the inference drawn from the fact; the writer being perſuaded, that the ſucceeding teeth are thereby frequently ill-placed, by one tooth appearing long before others, and growing ſo large as not to allow proper ſpace for the reſt.

frequently neceſſary to lance the gums ſeveral times, as before remarked, eſpecially on account of the extraordinary difficulty with which ſome infants cut their double teeth, which are furniſhed with two or more knobs, or points. Purging, fever, and even convulſions will ſometimes ariſe from only one point of a large tooth offending the perioſteum that covers it; and being nearer the ſurface, than the other points, the lancet may ſometimes not completely divide the membrane that lies over the reſt, (or it is afterwards healed;) and this part not being injured by the tooth, the ſymptoms ſubſide on having divided that portion of membrane that was inflamed. But in a little time, another point of the ſame tooth is found to irritate the perioſteum, and calls for the like aſſiſtance of the lancet, which again removes all the complaints. This, at leaſt, I have conceived to be the proceſs, when I have found lancing a large tooth immediately remove every terrible ſymptom, though the fever and other complaints have returned, and the whole of the tooth not appeared till the operation has been three or four times repeated. I have ſeen the like good effect from it, when children have been cutting a number of teeth in ſucceſſion, and have bred them all with convulſions. Nothing having relieved or

prevented theſe terrible ſymptoms but lancing the gums, which has removed them every time it has been done, one or more teeth appearing a day or two after each operation.*—In ſuch caſes, it has been ſaid, it will often be proper to draw the lancet along a great part of one, or even both the jaws, inſtead of over only one or two teeth.

Some writers, however, and Dr. MILLAR particularly, have adviſed not to cut quite down to the teeth, but only to ſcarify the gums, unleſs the teeth are very near. He ſuſpects that the inſtrument often injures them, and produces caries, which he thinks will be communicated to the ſucceeding ſet of teeth. But this is mere theory, and I apprehend ariſes for want of duly attending to the ſtate of the teeth, which are perfect bone, and covered with a ſtrong enamel, long before they get through the gums. The manner of the ſecond teething of children likewiſe forbids ſuch a fear; for though the firſt ſet, (which are deſigned by nature to be only of ſhort duration) ſhould actually be injured by the lancet, the ſucceeding ones are not at all likely to be affected by the carious ſtate of the

* Preciſely ſimilar remarks have been made by Mr. HUNTER. See his *Practical Treatiſe on the Diſeaſes of Teeth*, page 121.

former. For the firſt teeth of infants conſtantly become carious at the roots, and are looſened and expelled by that means, when left to nature alone; and though the upper parts of the new teeth are in contact with the carious bottoms of the firſt ſet, they never ſuffer from this circumſtance. I have dwelt the longer on this head, becauſe writers are not agreed on the ſubject, and it is a matter oftentimes of no ſmall importance. I have, however, written from *experience*, and am *perfectly ſatisfied* of the propriety and ſafety of what I have ventured to recommend.

It ſhould be a pretty general rule during the time of teething, to abate a little of the uſual quantity of the food, and to increaſe the quantity of drink, unleſs the child is very weakly, or every thing is going on perfectly well: or if the child be at the breaſt, a ſimilar regard ought to be paid to the diet of the nurſe.

Children will ſometimes have ulcerated gums in teething, and more frequently where they have not been lanced; which are eaſily cured by keeping the body open, and touching them with aſtringent applications. As much white vitriol, or roch alum as will give a moderate roughneſs to a little honey is uſually ſufficient for this pur-

pofe. But fhould this fail in any cafe, it muft be treated as directed under the head of Canker.

FEVER.

THOUGH fome writers have fuppofed infants to be as liable to Fevers, as adults, and from the fame caufes, I have, by no means, found it fo; having obferved for many years, as well in the hofpital, as in private practice, that infants do not readily take common fevers, though expofed for a long time to that contagion which has appeared to affect adults around them.* Their fevers are alfo of a fhort duration if properly treated, unlefs the few that arife from fome more permanent irritating caufe.

Young children, however, are difpofed to certain febrile complaints, and to fome peculiar to themfelves; which, as this work is now confiderably enlarged, with the defign of embracing all their complaints, I fhall beftow fome pains in fpecifying, as well as pointing out the treatment moft adapted to each.

* Every phyfician attending lying-in-hofpitals, muft not only have known many infants fuckled, without injury, through the whole ftage of bad fevers from which mothers have recovered, but alfo, in other inftances, fucking greedily within an hour or two of their mothers death.

The more frequent Caufes of fever, are teething, foul bowels, worms, glandular difeafes, fome eruptive and very contagious complaint, or taking cold; and are often attended with fymptoms peculiar to children. If from the laft mentioned caufe, and the cold be fevere, it will always be attended with a cough, and hoarfenefs, and fome difficulty of breathing, and often with running at the nofe or eyes, which will diftinguifh the fever from all others, except it be the meafles; which will be attended likewife with violent fneezing, and a peculiar appearance of the eyes not often met with in a common cold.

If a fever from cold be confiderable, the cough violent, and the difficulty of breathing very great, a blifter will always be fafe and expedient, and may be applied at the pit of the ftomach inftead of the back, as being both lefs painful under any motion of the body, and more readily got at to be dreffed, or for the application of frefh cloths, where the difcharge happens to be confiderable. But if the fever and difficulty of breathing fhould not be very much abated by the blifter, children, though within the twelvemonth, will bear and even be greatly benefited by the lofs of a little blood,* and if

* In mittendo fanguine, non tam annos medicus numerare,

not by the lancet, at leaſt by the application of two or three leeches, as I have frequently ſeen; and I mention this again, becauſe it has been thought ſo highly improper for infants. But I can venture to ſay, they will be much leſs reduced by it, than by the continuance of the fever, which the loſs of a little blood will, in many caſes, ſhorten by two or three days: it is alſo ſometimes abſolutely neceſſary, as in peripneumonic caſes, in which it may even be repeated with ſafety and advantage*. Indeed, in ſome inſtances the only mean of ſaving an infant's life, is taking away at once a ſufficient quantity of blood, at the commencement of the peripneumonic ſymptoms. And this becomes the more expedient, from the conſideration that not only inflammation, but true tubercles of the lungs are formed at a very early age; having

quam vires ægrotantis æſtimare debit. CELSUS. *Lib.* ii. *cap.* 10. *p.* 78.

GALEN indeed forbad bleeding till after fourteen years of age, but ſince the time of CELSUS, that abſurd idea has been exploded. RHAZES permitted cupping after three or four months; AVICENNA at a year old.—Some allowed of bleeding in the feet or legs, though not in the upper parts; but this uſeful operation is now juſtly unconfined, and extended, occaſionally, to every period.

* Multa in præcipiti periculo rectè fiunt, aliàs amittenda. *Id. Lib.* iii. *cap.* 18. *p.* 150.

myſelf ſeen them, after death, as will be further noticed on the meſenteric fever. Oily medicines, likewiſe, made into a neat emulſion, are often uſeful, eſpecially if the child be not ſuckled; but they ſhould be preceded by an emetic of wine of antimony, as there is uſually much phlegm on the ſtomach; children never coughing it up. In many caſes it is alſo neceſſary to repeat the emetic, as often as the phlegm in the throat is collected in ſuch a quantity as ſeems to impede reſpiration. But if the cough be dry or convulſive, BATES's ſpirit. ſal, ammoniaci ſuccinat. may be ſafely and uſefully adminiſtered, if there be not much fever. The body at the ſame time ſhould be kept perfectly open, and this purpoſe is uſually well anſwered by ſmaller doſes of wine of antimony, or of Dr. JAMES's powder; but if they ſhould fail to procure ſtools, as they ſometimes will, where there is much fever they rather do harm than good, unleſs a little manna, or rhubarb be joined with them.

Though the ſeverer treatment above-mentioned is indiſpenſable when the cough, difficulty of breathing, and degree of fever are conſiderable; it is proper here to remark, that I have known children of two or three years old ſeized with a ſudden difficulty of breathing in coughs ariſing from common colds, where the fever has not

been proportionate to the other ſymptoms. In ſuch caſes, the difficulty of breathing may ariſe from bile on the ſtomach, and it may therefore be prudent previouſly to bleeding and a bliſter, to give a ſmall doſe of JAMES's powder, which will pretty certainly act as a vomit, if our ſuſpicion has been juſt; and will remove that threatening ſymptom very ſoon.

It is ſcarcely neceſſary to remind the reader, that preparations of antimony are very powerful medicines, and not to be preſcribed indiſcriminately as they ſometimes are by thoſe who are, in no wiſe, competent judges;* and againſt which practitioners will do well in offering a caution in the nurſery. But where ſuch medicines are found to agree, and keep the belly open, children frequently ſtand in need of no other; though where the fever has been very conſiderable, I have given nitre to advantage to infants of only a few months old. In the little fevers ariſing from taking cold, to which ſome children are very liable, I often join it with Dr. JAMES's powder, and a few grains of the compound powder of contrayerva, lowered with teſtacea; which I find to be a medicine exceedingly uſeful,

* A nurſe very lately propoſed giving half a grain of tartariſed antimony to an infant of a few days old.

when given in time.—If the head is much affected, putting the feet into warm water, or applying a milt to them juſt taken from the animal, are admirable remedies; and I think have ſometimes ſaved a life after all hope had been given up. Or a little freſh leaven, or dough, as adviſed by Mr. *Le Febure de Villebrune*, may be ſpread thinly over the ſoles of the feet. If the fever be accompanied with much cough, and attended with difficulty of breathing, which comes on by fits, both may be greatly relieved by the compound ſpirit of vitriolic ether, given three or four times a day.

If the fever be not owing to taking cold, to worms, teething, or ſome eruptive complaint, it will generally be found to ariſe from ſome foulneſs in the firſt-paſſages, in which caſe, opening the belly, and afterwards giving an emetic, and the teſtaceous powders, uſually remove it. On this account, great attention ought to be paid to the ſtate of the bowels, and not only in regard to the number of ſtools, but their kind. This ſhould be a maxim with all thoſe who have the ſuperintendance of children, eſpecially infants, under whatever complaints they may labour; as a principal indication muſt be taken from the ſtate of their bowels. In the preſent inſtance, if a laxative and emetic have not removed the

fever, opening medicines muſt be continued a while longer, eſpecially caſtor-oil; but if the ſtools are very fetid, the pulvis è ſcammonio cum calomel. or ſmall doſes of calomel alone, are the fitteſt purge. I have known not only convulſions, dilated pupils, and drowſineſs, but alſo paralytic affections, attended with great pain and continual fever, induced merely by a foul ſtate of the bowels; where, after the complaint had been unſucceſsfully treated as a fever of another kind, all the ſymptoms have been removed at once by an active purge. Even infants of only three or four months old will often have very conſiderable fever, and fits, with ſo coſtive a ſtate of the bowels as to require ſtrong purgative medicines to be repeated for ſeveral ſucceſſive days, with clyſters and the warm-bath, before the obſtruction can be removed, or the fever will at all abate. And I doubt not, it may be matter of ſurpriſe to thoſe who may not frequently have met with ſuch caſes, to find how great a quantity of purging medicines have been taken by a tender infant before one proper ſtool could be procured,* and how certainly a relapſe will take place, if the opening plan be not perſevered in, in the manner recommended.—In

* See pages 23, 24.

leſs urgent caſes, and eſpecially in very young ſubjects, much gentler means will uſually ſucceed, and after the belly has been once or more well opened, many common fevers will nearly ſubſide; after which, it will frequently be proper to return to the teſtaceous powders, in one form or other. Theſe will compoſe an admirable medicine for very young children, as well under little fevers, as for almoſt all their complaints not attended with coſtiveneſs. This, the judicious HARRIS was ſo ſenſible of, that he thinks them alone ſufficient to effect almoſt every thing during the *infant* ſtate, and has done unſpeakable ſervice by aboliſhing that *indiſcriminate* recourſe to cordial, and other heating and rough medicines, ſuch as mercury, aurum fulminans, theriaca, &c. together with various anile and ſuperſtitious remedies, which the ancient writers frequently recommended on occaſions peculiarly improper. And though abſorbents will not do every thing he has imagined, yet there are very few medicines of ſuch general uſe. But ſhould the fever withſtand theſe common remedies, or be found to increaſe, it will be neceſſary to give ſome of thoſe before recommended, or what is often very uſeful, little draughts of ſuccus limon. and kali ppt. in which the latter is left a little predominant; or a few drops of the ſpirit. ammoniæ

comp. four or five times a day, as recommended for the fever of dentition.

In many little fevers of infants, where the cauſe has not been ſo obvious as it commonly is, I have experienced very good effects from perſevering in the uſe of ſmall doſes of the vinum antimonii, given in a ſaline draught; this medicine ſometimes acting as an emetic or purge, and at others, as a ſtimulant and diaphoretic, poſſeſſes peculiar advantages. But the manner in which this medicine is directed to be prepared in the new pharmacopæia, under the title of vinum antimonii tartariſati, renders it exceedingly preferable to the common antimonial wine; and may be frequently given in the place of the pulvis antimonialis, in the doſe of five or ſix drops, to a young infant; or in the doſe of three drops, inſtead of five of the old antimonial wine. It will be neceſſary, however, as noticed on a former occaſion, that the bowels be ſomewiſe kept open under the uſe of this, and of every preparation of antimony.

There is a fever to which children long after the time of teething are liable, that is of no marked type, and turns out to be owing to foulneſs of the primæ viæ; but rather from the acrid ſecretions from the liver, or other glands, than from a collection of feces, or a coſtive habit,

and is more remarkable for the great pain in the bowels than for any other ſymptom.

It commences like other little fevers in children, and is of uncertain duration. The pulſe is oftentimes exceedingly quick, the breathing bad; the tongue dry and brown; with a cough more or leſs violent, throughout the complaint. On this account, it is in the beginning often ſuſpected to be owing to taking cold; but the cauſe, I believe, is always in the firſt-paſſages.

Though procuring ſtools freely for ſeveral days is found to abate the fever, yet the child is at no time entirely free from it; though it frequently remits.

The ſtools, which at firſt are very fetid, in a little time become very numerous, mixed with a great quantity of ſlimy matter, and are attended, or followed, by very great pain. This has ſometimes diſcouraged practitioners from further purging; but where no other ſource of fever is diſcovered, and cooling and antimonial medicines are found to afford no eſſential relief, the exhibition of repeated purges has proved the ſureſt remedy.

To this end, two or three grains of calomel, taken every night, and infus. ſennæ the next morning, has ſeemed to have the beſt effect, in the earlieſt ſtage of the diſorder; but after the

ſevere pain and ſlimy ſtools have taken place, caſtor-oil may be ſubſtituted, and given only every ſecond or third day; compoſing the bowels, and taking off the ſpaſmodic pains, by repeated doſes of laudanum, on the intermediate days, and eſpecially on the nights after the operation of purgatives.

This plan ſhould be continued until the fever entirely ſubſides, (which will ſometimes run out to two, or even three weeks) and the appetite for food returns. Previouſly to which ſome light bitter, given in a ſaline draught or lac amygd. or with the pulv. è tragacanth. comp. in the intervals of purging, will tend to comfort the bowels, and haſten the natural inclination for food, to which there is often a long averſion.

There is a fever which may be juſt hinted at in this place, which will be more particularly noticed in the chapter on hydrocephalus, for which alſo repeated purging is the remedy.—The ſymptoms ſtrongly reſemble thoſe of water in the head, but the ſtools are of a very uncommon appearance, reſembling meconium; which, however, reſiſt common purges, but are brought away in great quantities, and for a conſiderable time, by calomel; the fever and ſtupor abating in proportion as this kind of ſtool is brought away.

On the decline of ſome fevers, eſpecially thoſe ariſing from foul bowels, it is not uncommon to ſee an eruption on the ſkin, reſembling that called the red-gum, in the month, and ſometimes even the thruſh will make its appearance, though the infant may have had that complaint before; which are marks of the great diſturbance the firſt-paſſages have ſuffered, and of the conſent they have with the ſkin: the former, it has been ſaid, is always a favourable indication, but the obſervation is far from holding good in regard to the thruſh.

At the decline alſo of certain anomalous fevers that have laſted for ten or twelve days, (and ſometimes after the febris ſcarlatina) great pain of the neck has taken place, attended with a little tumour of the part, and great rigidity of the muſcles, drawing the head forcibly to one ſide. A general debility, and want of appetite has continued, though the bark has been adminiſtered, and ſeemed no wiſe to diſagree. In this ſtate, fomentations and poultices applied to the neck, together with ſome volatile embrocation, has ſoon removed the contraction, and pain; after which children have recovered as on a ſudden their appetite and ſpirits.

During very cold weather, I have known a ſlighter degree of pain and ſtiffneſs of the neck,

with a little fever, return a week or two afterwards; poſſibly, from taking cold, and as I have thought, from improper food. The antimonial powder with ſaline draughts, and a repetition of the topical applications, have in ſuch caſe had an immediate good effect.

I have ſometimes met with a fever, more remarkable for its being attended with inflamed and ſometimes painful tumours, than for any other ſymptom peculiar to it. Theſe are ſeated chiefly on the legs, and particularly along the ſpine of the tibiæ; and riſe in a day or two to the ſize of a nutmeg. They are marked with all the appearances of abſceſſes, feeling as if they contained matter, and on this account, they put on a formidable aſpect to ſuch as may not often have ſeen the diſeaſe; but what is remarkable, they never, I believe, come to ſuppuration, unleſs irritated by the clothes or other means, but diſappear again in a few days, though the fever ſometimes continues. The like appearances have been met with in adults, eſpecially females, though perhaps more commonly in children from three to ten years of age; but are not peculiar to ſcrofulous habits, though the tumours have very much of a ſcrofulous appearance and feel. As far as my experience has gone, (for I believe it is not a very common

complaint) they are conjoined more frequently with that fever which attends a foul ſtate of the bowels, than with any other; which therefore requires repeated purging, eſpecially with calomel: and on this account, the pulvis è ſcammon. cum calomel. becomes a convenient preparation. Saline draughts with the ſpir. ætheris vitriolici comp. may be given on the intermediate days, and in the end the bark is commonly uſeful.

Theſe appearances have ſometimes been preceded by ſcarlet ſpots, or patches, reſembling the petæchiæ obſerved in malignant fevers, as was noticed under the article of raſhes.

Fevers in children of three or four years old, are ſometimes tedious of cure by any of the above means, and like thoſe of adults require the bark, (eſpecially under the recurrence of the thruſh;) which ſhould be adminiſtered in a light decoction, three or four times a day, in ſuch doſes as the ſymptoms may require.

MESENTERIC-FEVER.

ANOTHER cauſe of fever has been hinted at, which is obſtructed glands, eſpecially the meſenteric; and is often a fore-runner of the true hectic fever, or fatal maraſmus.

It, indeed, frequently arifes from fcrofula, which then difcovers itfelf by other marks; and will require its peculiar treatment. But there is an early ftage of glandular obftruction in the mefentery, and of the fever here alluded to, that is often falfely attributed to worms; but will not yield to mere purgative medicines, as that diforder ufually does. It attacks children from the age of three or four years, the fever remitting, and fometimes intermitting, irregularly; is attended with lofs of appetite, fwelled belly, and pain in the bowels; the latter fometimes taking place, more or lefs, every day, or is generally more violent if the child be a day or two free from it.

After opening the bowels, half a grain, or a grain of calomel may be given to advantage, two or three times a week, and on the intermediate days fmall dofes of the natron ppt. either alone, or neutralized with the juice of lemons, or in fome inftances partially fo. If the belly be very coftive, as it often is, an infufion of fpong. uft. and fenna is more effectual than any thing; and is an excellent remedy for many little fevers, in older children, when the primæ viæ are particularly concerned. When the glandular fever, juft now mentioned, has abated, fome light bitter, as of chamomile flowers, is ufeful to

brace the ſtomach and bowels; and to prevent a relapſe, it will often be found neceſſary to adminiſter ſome chalybeate, of which the tinctura florum martialium is one of the fitteſt for children: if it ſhould offend the ſtomach, a few drops of the tincture of cardamoms, or other ſtomachic, ſhould be joined with it.

But as the meſenteric fever, from its great fatality and frequency, has lately very much engaged the attention of writers, it may be proper to conſider it a little more diſtinctly in ſome of its principal ſtages; in each of which its nature and treatment ſometimes materially differ. For before the meſenteric glands become much enlarged, or the fever continual; whilſt the appetite continues, and the firſt digeſtion is but little impaired, and no purging has taken place; the opening mixture of ſponge and ſenna, with a few doſes of calomel, and afterwards bitters and chalybeates, are the only remedies very likely to be called for; and almoſt always ſucceed. In this ſtate, the diſorder may ſtill be conſidered as in its firſt ſtage, and of which an unuſual coſtiveneſs, the hardneſs and recurring pains in the belly, and a remitting fever, are the principal ſymptoms. The limits of this work, however, will not allow of a particular detail of the many others that attend this fever through its various

ſtages; and it is preſumed, they are ſo well known as to render it unneceſſary. But in general, it may be ſaid, that indigeſtion, coſtiveneſs or purging, irregular appetite, fluſhed cheeks, or a total loſs of colour, impaired ſtrength and ſpirits, remitting fever, and a hard and tumid belly, with emaciated limbs, are amongſt the more conſtant ſymptoms attending, at one period or other of the diſeaſe.

This being a glandular complaint, not only are the glands of the meſentery affected, but I have found thoſe of other parts, and eſpecially of the lungs, in a very morbid ſtate before any of thoſe ſymptoms of inflammation have been noticed, which are conſtantly met with, in ſimilar caſes, in older ſubjects.*

* In examining the viſcera of more than one infant of only a few months old, I have found tubercles, and even purulent matter in the lungs, which have not been preceded by any manifeſt ſymptoms of ſuch miſchief, and even where there has been no cough nor difficulty of breathing, until a few days before death, and then only ſo ſlight as to be ſcarcely noticed. In one inſtance, I found in ſome parts of the lungs tubercles as large as nutmegs, and in others, cluſters of ſmaller ones, (and particularly about the ſuperior and back part of the mediaſtinum;) ſome of which were hard, and others full of matter.—Such appearances ſeem, therefore, to be common in all glandular diſeaſes, to rickets, and ſimilar diſorders ariſing from cachochymy; GLYSSON having re-

Children are liable to this fever till they become eight or ten years old, (and in ſcrofulous habits much longer) it being often a conſequence of the protraction of almoſt any of the preceding complaints, eſpecially thoſe of the firſt-paſſages and dentition, as well as of the meaſles, and a few others; of which that from teething will be ſeparately conſidered. Among the poor, it is too frequently owing to a coarſe and unwholeſome diet; indigeſtion at the ſtomach, and a conſequent vitiated chyle, with infarction, or obſtructions, in ſome of the internal glands or lymphatics, being among the primary remote cauſes of the diſeaſe.

As prophylactics, therefore, good air, exerciſe, gentle frictions, an eaſy dreſs, frequent waſhings of the body of young children with ſoap and warm water,* the cold-bath in older children; and eſpecially a light and nutritious diet, with ſuch mild aromatics as may aſſiſt digeſtion, are ſome of the principal and moſt efficacious means.

marked, that he ſeldom examined the bodies of infants dying of rickets, without meeting with ſuch appearances in the lungs.

* This idea is as ancient as the time of *Hippocrates*, who ſtrongly adviſes it.

De Salubri Diæta. § IX.

But when this diſeaſe is completely formed, it calls for the moſt powerful remedies; and ſuch have happily ſucceeded in ſeveral inſtances, wherein formerly little hope had been entertained.

As I have paſſed over many leſs important ſymptoms occurring in the different ſtages of this long diſeaſe, eſpecially ſuch as ariſe from ſome peculiarity of habit; I ſhall for the like reaſon confine theſe obſervations to the more general plan of treatment, without particularly noticing a variety of occaſional remedies, which ſuch ſymptoms may at different periods require.

In a general way, the principal indications are to remove the obſtructions in the lymphatic ſyſtem, and effect a reſolution of the indurated glands of the meſentery; to carry off this viſcid matter; and laſtly, to ſtrengthen the ſyſtem, and eſtabliſh a good digeſtion, as well by means of proper diet as by medicine. To accompliſh theſe intentions, attenuants and deobſtruents, purges, emetics, and tonics muſt be had recourſe to, in due turn.

Amongſt the firſt, and as general deobſtruents, are mercurial and antimonial remedies, neutral ſalts, ſoap, ſteel, and the cicuta; to which, with propriety I think, may be added, electricity.

In regard to the efficacy of mercury and steel in this diſeaſe, a vaſt crowd of teſtimonies appears among writers,* in almoſt every part of *Europe*. And a very rational idea has been ſuggeſted on this head, by Mr. ROYER, that of adminiſtering mercury, clyſter-wiſe; inaſmuch as the reſolution of local and partial obſtructions, does not ſo much require an exertion of the collected force of the ſyſtem, as deriving all the influence of proper remedies to the ſeat of the diſeaſe: an idea of late years pretty generally received, and in ſome inſtances ſucceſsfully adapted to the cure of ſcrofula, as well as ſome other chronical diſorders.

Calomel is, perhaps, one of the fitteſt remedies of this claſs, and when adminiſtered by the mouth, may be combined with ſome purgative medicine, and given for ſeveral weeks, till there ſhall be ſome favourable change in the feel and ſize of the belly.

The lighteſt preparations of ſteel are uſually preferable, ſuch as its tinctures, or the ſalt, or merely ſome chalybeate water; which will act both as aperitives and tonics. Amongſt antimonials, the kermes mineral is found by experience

* *White, Hartmann, Worlhof, Theden, Burchard, Baumè, Baumes, Roſeen, Fouquet,* &c.

to be more generally uſeful than any other preparation.

The Evacuants mentioned as proper in this diſeaſe, were emetics and purges; to which may be added diaphoretics. The two former are more eſſentially neceſſary; but muſt be adapted and carefully doſed, agreeably to the ſtate of the bowels of the patient. As a purge, rhubarb and tartariſed kali are generally the ſafeſt and moſt effectual, and may be perſevered in for the greateſt length of time; or the compoſition which, in regard to many caſes, has been deſervedly extolled by Sir WILLIAM FORDYCE, rhubarb and polychreſt ſalt; which, whenever mercury may not be preferred, ſhould be exhibited daily for ſeveral weeks, and will ſometimes reſtore the patient without recourſe to any other means, when the diſorder is not of long ſtanding; being at once both a purge and an efficacious deobſtruent.

As a Diaphoretic, ſarſaparilla, or a more compound decoction of the woods; which may be taken together with any of the above mentioned remedies.

The laſt means recommended were tonics, which can very rarely be diſpenſed with; ſince although the obſtructions ſhould actually be removed, the emaciated ſtate to which the patient

is generally reduced, peculiarly calls for bracing remedies, eſpecially with a view to ſtrengthen the ſtomach and alimentary canal, and promoting a good digeſtion; the only means of obtaining a bland and nutritious chyle, by which the body may be conſerved in good health. To this end, the bark, ſteel, the cold-bath, (the latter of which, eſpecially, ſhould not be attempted till the obſtructions are removed) light bitters and aromatics are the principal remedies; to one or more of which, recourſe may be had, as the degree of remaining fever, and the ſtate of the bowels, or the debility of the patient may point out. To theſe may be joined daily frictions, eſpecially of the belly, limbs, and ſpine; or the common ſoap-plaſter, or one compoſed of ointment of marſh-mallows, gum ammoniac, and oil of chamomile, may be applied over the whole belly: or the body be covered all over with ſea-ſalt, reduced to a very fine powder.

It has been already hinted, that the diet ought to be of the lighteſt and moſt nutritious kind, and carefully adapted to the age and other circumſtances of the child; who, if at a due age, ought in many inſtances to partake of light white meats, as well as vegetables, and plain jellies; but always avoiding fat and greaſy aliments, paſtry, and whatever may not be duly, as

well as quickly digested, or will not form a bland and nutritious chyle, however readily they may get out of the ſtomach.

Though in ſome inſtances, merely purging with calomel or rhubarb, for a length of time, has been ſaid to ſucceed, and in others, ſome one of the above remedies may be more adapted to the patient than the reſt; yet in general, each of them will be uſeful, at one period or other of the complaint, and ſometimes the union of ſeveral: but above all, purging is always the moſt eſſential to the cure of this dangerous diſeaſe. And though it is oftentimes attended with coſtiveneſs and a voracious appetite, it is, at others, accompanied with a loathing of all food, and frequent ſtools, which do not reduce the belly, but too often deter practitioners from the uſe of active, or repeated purges; without which, however, experience proves there can be no proſpect of ſucceſs, after the belly has once become enlarged.—I ſhall cloſe theſe obſervations with offering the following form, which in a general way I have found very ſuitable. It ſhould be continued for a length of time, taking care that the bowels be kept properly open.

℞. Calomelan. gr. j. ad. ij.
Pulv. Ipecac. gr. ſs. ad gr. j.
Zingiber. gr. vj.

Miſce, ft. Pilulæ iv, cum quantitat. ſufficient. vel Conf. aromaticæ, vel Conf. opiatæ, ut alvi ſtatus poſtulet. E quibus ſumatur j ſingulis aut alternis noctibus, vel omni nocte manè que. Poſt aliquod tempus addentur pulv. rad. columbæ grana octo vel decem.—Together with this pill, the cicuta will ſometimes be very ſerviceable.

HECTIC FEVER *and* MARASMUS.

NOT a few both of the preceding and following complaints are ſometimes found to induce a confirmed hectic fever, and maraſmus, called by ſome writers atrophia lactentium; though it often comes on too late properly to admit of the name. I have nothing new, indeed, to offer on this diſeaſe when it is far advanced, unleſs it be by way of encouragement to hope for a better iſſue in the hectic fever, under certain circumſtances, than we are wont to expect.

This fever, as it is apt to ariſe from other complaints, is very often owing to their having been imprudently treated, or imperfectly cured, eſpecially by ſuppreſſing ſome eruption or diſcharge from the ſkin, or incautiouſly ſtopping a purging, during the time of teething. In ſuch caſes, and, indeed, whenever the hectic fever is of ſome ſtanding, the meſenteric glands become indurated,

greatly increaſed in ſize, and often ſuppurate, the belly getting large, though the limbs and other parts become emaciated; which ſtate has been conſidered in the former chapter, and has been ſhewn to be curable, or otherwiſe, according to the degree of induration, and the length of time it has exiſted. But there is ſometimes a threatening appearance of hectic fever, where, nevertheleſs, nature effects a ſalutary and wonderful change, and will reſtore the emaciated infant as from the very jaws of death. And this, indeed, is often the work only of nature, art, doing no more than ſuperintending, and preventing her being counteracted by the uſe of improper medicines, or diet.

Nature alone will, indeed, oftentimes effect wonders for infants, and far beyond any thing to be expected in adults, if ſhe be not officiouſly counteracted. And the reaſon is obvious; it being well obſerved by a great man, and a good phyſician,* lately deceaſed, that " there is, in truth, a greater luxuriancy of life and health in infancy, than in any other period in life. Infants, it is acknowledged, are more delicately ſenſible to injury, than thoſe advanced in life;

* Dr. GREGORY—*Comparative view of the State and Faculties of Man, with thoſe of the animal World.* 1785.

but, to compenſate this, their fibres and veſſels are more capable of diſtention, their whole ſyſtem is more flexible, their fluids are leſs acrid, and leſs diſpoſed to putreſcence; they bear all evacuations more eaſily, except that of blood; and, which is an important circumſtance in their favour, they never ſuffer from the terrors of a diſtracted imagination. Their ſpirits are lively and equal; they quickly forget their paſt ſufferings, and never anticipate the future. In conſequence of theſe advantages, children recover from diſeaſes, under, ſuch unfavourable ſymptoms as are never ſurvived by adults. If they waſte more quickly under ſickneſs, their recovery from it is quick in proportion, and generally more complete than in older people; as diſeaſes ſeldom leave thoſe baneful effects on their conſtitutions, ſo frequent in adults. In ſhort, a phyſician ought ſcarce ever to deſpair of a child's life, while it continues to breathe."—In further ſupport of this ſentiment it may be obſerved, that their complaints are not often attended with acute fever like thoſe of adults, which however ſalutary in ſome inſtances, is, from miſmanagement, or otherwiſe, more commonly diſpoſed to break up the ſyſtem, than to rectify the machine.

The above mentioned ſalutary turns in the true hectic fever, as far as I have obſerved, are

chiefly in that ſpecies of it ariſing from worms, or teething; and which I have known recoveries after hope had long been given up, and all attempts been laid aſide. There is, indeed, an atrophy in infants for want of the breaſt, or from the unſuitableneſs of it, (which is the true atrophia lactentium) or of whatever elſe may be the child's ordinary food, as I ſhall inſtance in another place; but this is not uſually attended with fever, and is to be cured merely by making that change, which the nature of the different occaſions point out. HARRIS recounts ſome remarkable recoveries in what he calls the atrophia verminoſa, and attributes the cures to the free uſe of the hydrargyrus cum ſulphure, carefully prepared: but I have ſeen none ſo marvellous as in the atrophia dententium. In this, I have known children after being reduced by purging, and other complaints, lying for three months together in the cradle, ſcarcely fit to be moved, with continual fever, fluſhed cheeks, emaciated countenance and limbs, a large belly, inceſſant cough, and almoſt without taking any nouriſhment, recover, as it were in a few days, upon unexpectedly cutting half a dozen teeth.

After what I have ſaid on the true hectic fever, it will not be expected I ſhould offer much on

the head of medicines; I ſhall therefore only obſerve, that the chief object in this advanced ſtage of the diſeaſe is an attention to the ſtate of the bowels. This will be found to vary frequently; ſometimes calling for reſtringent, and at others, opening remedies. In a view to the former, SYDENHAM's rhubarb-beer† is a very good medicine. Alſo purging with mercury, if that has not already been done, ſhould even now be attempted, ſince children in this ſtate will often bear ſtronger doſes of purging medicines, and more frequently repeated, than under any other circumſtances.——Attention, likewiſe, ſhould be paid to the diet, which ought chiefly to be of milk, rice, ſemolina, and ſuch like, with light puddings: but above all, children ſhould enjoy plenty of freſh air, and take as much exerciſe as their degree of debility may admit of.

† Take of choice rhubarb ſliced, two drams; let it be put into a glaſs bottle, well ſtopped, with a quart of ſmall-beer, or any other liquor the child may make uſe of. This medicated beer is to be his ordinary drink. When this quantity is drank, a ſecond, and a third quart of beer may be poured on, as before; after which the rhubarb will commonly have loſt its virtue. Should the beer firſt poured on be too much impregnated with rhubarb, and purge too much, another pint may be added preſently after the firſt is drank up.

In Dr. ARMSTRONG's ſecond edition, is a pretty long chapter on the hectic fever of teething children, wherein ſeveral medicines are preſcribed, which the doctor apprehends may be very ſerviceable early in the diſeaſe. He ſpeaks of it as a very common complaint, beginning like other fevers, and gradually becoming remitting; then a ſlow continual fever, and terminating in a fatal hectic. Dr. BUTTER likewiſe expreſſes himſelf much in the like manner, in an accurate account he has given of a fever that frequently made its appearance, as it ſhould ſeem, in *Derbyſhire*, which he terms the infantile remittent fever; of which further notice will be taken in its place.

It is very probable, that a fever of the deſcription given by Dr. ARMSTRONG may be common among paupers, relieved at diſpenſaries, and may deſerve ſuch a name, but, I believe, it will be rarely met with in higher ranks of life; and if ſo, perhaps, that ought to have been intimated in a popular work. It ſeems to me, (and both Dr. BUTTER, and Dr. ARMSTRONG, indeed, ſay as much) to ariſe from improper food and nurſing, joined with crudities and a coſtive ſtate of the bowels, and has nothing uncommon in it. When advice is ſought for in proper

time, it, accordingly, appears to be nothing more than the fever I have described arising from a foul state of the bowels, aggravated by neglect; and is easily cured by such medicines as are best calculated to clear the first passages. Should this, however, not be attended to, it may degenerate into a continual fever; but it is not even then peculiar to the age Dr. ARMSTRONG has specified, nor by any means, the common hectic fever of dentition. At this period, indeed, children call for more exercise, air, and general attention than common people can procure for them; it is, therefore, not to be wondered at, if neglected and costive, they should at this time fall into slow fevers, whether aggravated or not, by the shooting of their teeth.

REMITTENT-FEVER.

NOTWITHSTANDING what has been observed respecting the remittent-fever as described by Dr. ARMSTRONG and BUTTER, there is certainly a fever of that type that deserves a cursory consideration in respect to a peculiar symptom, which, I believe, always attends it; though the fever itself certainly arises merely from an affection of the primæ viæ.

Indeed, it is well known to practitioners much converſant with the diſorders of children, that various febrile affections, differing in degree, and the time of their continuance, originate from the ſtate of the firſt-paſſages; but as the treatment is ſimilar in them all, varying chiefly in regard to the ſtrength, or other circumſtance of the purging medicines exhibited, it would be equally unneceſſary and perplexing to multiply names, where no eſſential diſtinction ſubſiſts.

The preſent chapter therefore is added only to denote a fever of this kind, which conſtantly remits and increaſes again, ſometimes for three or four weeks, or ſometimes much longer, and is attended with the remarkable ſymptom of picking at various parts of the body until they are made to bleed and even become ſore, particularly the fingers, noſe, the lips, or the tongue. But this fever being equally remarkable for being always, I believe, void of danger, it is neceſſary only to remark, that it ſeldom attacks children under four years of age, nor upwards of ten; and that, although it has been diſtinguiſhed into the acute, ſlow, and low infantile-remittent, it requires much leſs variety of treatment than ſuch diſtinctions ſeem to import. The proper, and always ſucceſsful plan, being confined to the repeated exhibition of ſome gentle

purgative medicine, or light cordials, when accompanied with much languor, as is not unfrequently the caſe.

Febris Scarlatina—with *or* without Ulceration *of the* Throat.

WHENEVER the Scarlet-fever becomes epidemic among adults, children rarely fail being attacked by it, in great numbers, and frequently ſink under it. It is indeed, rather a child's diſeaſe, and very contagious among them, but is not often communicated from them to adults. It has engaged the pen of the moſt able phyſicians, and is therefore well underſtood in this day, and needs only on this occaſion, to be adverted to as one very incident to children, and its moſt approved method of treatment briefly pointed out.

The ſcarlet-fever with ulcerated throat has, perhaps, been diſtinguiſhed in too refined a manner, by ſome writers, into the ſcarlet-fever with malignant ulcerated throat, and the malignant ſore throat with efflorescence, or redneſs, on the ſkin. But ſuch diſtinction, it is apprehended, is needleſs, ſince the experienced practitioner will always be guided by the degree of tendency in the ſyſtem either to an inflammatory

or putrid diathesis; and the less experienced will only be perplexed by multiplied distinctions.

One observation, indeed, may be offered on this head, which is, the propriety of distinguishing the mild scarlet-fever (in which the throat is much inflamed, and slightly affected with superficial and white foulness rather than sloughs,) from the more malignant kind, in which the tonsils are less swelled and florid, and exhibit the precise complaint by some practitioners termed the angina maligna with efflorescence on the skin. An error in this respect, has certainly led less experienced practitioners to administer both bark and wine too early and liberally in the mild scarlet-fever, which has thereby degenerated into a low remittent, bordering on hectic; and unless the treatment has been changed in a little time, has endangered the life of the patient.

The mildest species of scarlatina anginosa should also be carefully distinguished from the true inflammatory affection of the tonsils, which it will sometimes resemble in its first stages: but the genuine marks of the two diseases, and the cast of the epidemics reigning at the time, will direct the attentive practitioner; who will in less certain cases, take a middle course in his method of treatment, till the characteristic symptoms of either shall become more evident.

There is, however, a ſcarlet-fever that is not attended with any affection of the throat, and was long ago deſcribed by SYDENHAM,* though not much inſiſted upon by later writers, which is attended with a harder pulſe, and other ſymptoms of an inflammatory diſpoſition, but nevertheleſs, in every inſtance that I have met with, calls for the ſame general treatment, only more cautiouſly adapting the neceſſary cordials and tonics to the degree of fever, eſpecially in the commencement of the complaint.

The febris ſcarlatina of every ſpecies begins with the common ſymptoms of fever, often with languor and diſpoſition to fainting, ſickneſs, a quick pulſe, and pain in the head. The eyes are inflamed, and where the throat is affected, there is frequently a ſtiffneſs of the muſcles of the neck very early in the diſeaſe, which is ſoon followed by ſome difficulty in ſwallowing. The affection of the neck ſhould be carefully inquired into, eſpecially in younger children; the ſoreneſs of the throat being ſometimes not complained of in the moſt ſevere attacks of the diſeaſe, until but little proſpect remains of any mode of treatment being attended with ſucceſs. The fever generally increaſes in the evening,

* See alſo WITHERING and CULLEN.

and is often accompanied with tranſient fits of delirium; but ſome remiſſion takes place towards morning, with ſweating; and on the ſecond, or third day the efflorefcence appears on the ſkin, and generally firſt on the face, neck, and breaſt.

At this time, the parts tumify, eſpecially the hands and feet; and the patient complains much of pain in the head; is comatoſe or very reſtleſs, and is at times delirious; the tongue is in the beginning very white and dry, afterwards becomes foul, and then of a florid red. About the fifth day, there is uſually a remiſſion of fever, and the eruption then beginning to ſcale off, diſappears about the ſeventh. If the diſeaſe has been violent, the patient is about ſeven days more in a low ſtate; and it is oftentimes a fortnight longer before he recovers his ſtrength and ſpirits, and in ſome caſes, is diſtreſſed with foul abſceſſes on the outſide of the neck.

The limits of this work allow me only to obſerve that the method of cure being directed to the two indications of the general diatheſis, and the affection of the throat, the nature and extent of theſe muſt ever be kept in view, and the ſyſtem be duly ſupported. Should the body be coſtive at the time of the attack, an opening medicine ſhould be given previous to the adminiſtering of

bark or cordials. The throat ſhould be often gargled or rather ſyringed, with mucilaginous infuſions, or decoctions, rendered more or leſs ſtimulant; ſuch as the decoct. hord. with mel roſæ, warmed with ſpir. ammon. comp. tinct. myrrhæ, decoct. rad. ſerpent, or other ſuch like preparations: though the quality of the gargle is, perhaps, of far leſs importance, than its being frequently made uſe of, which is abſolutely neceſſary, eſpecially in young children, in order to keep the mouth tolerably clean; otherwiſe the difficulty of deglutition will be greatly increaſed, as well as the morbid mucus be conveyed into the ſtomach. On this account, alſo, the patient ought to waſh his mouth previouſly to taking his medicines or drinks.

This fever, eſpecially when epidemic, being almoſt conſtantly of a low type, the phyſician muſt not truſt to ſaline draughts, or other medicines of that claſs, without the addition of the conf. aromatica, radix ſerpent. or the bark, in one form or other. A moderate quantity of wine likewiſe, according to the age and other circumſtances of the patient, ſhould be given with the food, which ſhould conſiſt of whey, caudle, and ſuch like thin and nutritious aliments; with plenty of barley water, or gruel, with a view to promote a moderate perſpiration.

Should the affection of the throat, therefore, be evidently inflammatory, or ſhould a caſe occur where the fever may ſeem to be of that kind, (which may be better aſcertained by the hardneſs of the pulſe than any other ſymptom) it will very rarely bear bleeding, even in the beginning of the diſeaſe; as ſymptoms of debility generally attend in ſome period of the ſcarlet-fever, and will allow only of that middle courſe of treatment, hinted above.

In a general way, a cordial plan is required throughout the diſeaſe, and where the throat is much affected, either with ſloughs, or total blackneſs, the bark is indiſpenſibly neceſſary howſoever thick and florid the raſh, or however hot and dry the ſkin may be; the bark, in moderate doſes, as it were, extinguiſhing the fever in the milder ſpecies, above every other remedy, and in the more malignant it ſupports the ſyſtem, till the regular ſtages of the fever are accompliſhed, and a perfect criſis is formed. Young children take it very well, eſpecially the ſoft extract, diſſolved in a ſtrong decoction. Should it be diſpoſed to purge the child, a little of the ſpirit. cinnamomi, or a drop or two of the tinctura opii ſhould be added to it; or if the child, on the other hand, ſhould be two or three days without a ſtool, a laxative clyſter

ſhould be injected. Where delirium attends, a few drops of laudanum are often very ſerviceable. If there is much external ſwelling about the neck, bliſters to the part are frequently very uſeful.—Even after the efflorefcence has dried off kindly, an appearance reſembling the true gangrene has ſometimes ſeized the whole palatum molle, and the fever has been rekindled; but the parts recover their natural appearance after a few days, without any eſchar being thrown off. A more unpleaſant turn of the complaint at this time, is a ſecondary fever, which has already been hinted, as being ſometimes the conſequence of adminiſtering bark and wine too early, or too liberally in the milder ſcarlatina. In ſuch caſe, upon the diſappearance of the raſh, the limbs, eſpecially the hands continue ſwollen, and a general ſoreneſs takes place; the patient loſes ſtrength, and a tendency to hectic fever ſupervenes. The bark in this caſe is no longer uſeful; but ſoft demulcent medicines, and light cordials ſhould be adminiſtered, with aſſes milk, and a light nouriſhing diet; and country air ſhould be had recourſe to, if the patient ſhould not ſoon appear convaleſcent.

In ſome foreign parts, particularly *Sweden*, convaleſcents from this fever are many of them ſeized with a partial, and ſome, a more general

anasarca, which often proves fatal. Whether this be the natural courfe of the difeafe, or the confequence of improper treatment, may be doubted, as their beft phyficians feem to confider it too much of a kind with the meafles, and therefore may direct too cooling a regimen, and medicines.

Febris Miliaris, *or* Miliary Fever.

I Shall be brief on this complaint, which does not feem to be fo ftrictly a diforder of young children as of adults, unlefs from contagion; though I have feen one or more inftances of it, where no other perfon in the family has been fo affected, and without its fpreading to any other.

The eruption is preceded by the ufual fymptoms of fever, together with much itching of the fkin, and a very profufe perfpiration; which, however, procures no remiffion of the fever, until the eruption takes place, which is at the lateft on the third or fourth day. It very much refembles the meafles, but is a little elevated above the fkin, giving it a very rough feel. It is fometimes intermixed, from the beginning, with very fmall cryftallines; which on the other hand, often do not appear for a day or two after-

wards, and come out in ſucceſſive crops, eſpecially, if the child be kept over-hot. Some of the red eruptions are often larger than others, and reſemble thoſe in the ſcarlet fever, with which the miliary raſh is alſo ſometimes thought to be mixed, in ſeaſons when eruptive complaints are very rife.

Previous to the eruption, as well as ſometime afterwards, the patient is uſually very thirſty, is hot and cold, by fits, and the breathing is ſhort and difficult. The urine is high-coloured, there is a ſlight delirium, and ſometimes a ſore throat, eſpecially where the eruption is broad and very florid.

Children generally revive as the raſh comes out freely; but unleſs the complaint be very ſlight, the fever is rekindled, and they acquire no appetite for food until the eruption begins to turn dry.

This fever being of the low kind, is attended with great languor, and calls for ſupport; on which account both the medicines and diet ſhould be of the cordial kind. White-wine whey, and wine in the panada and ſagoe, in proportion to the degree of debility, are generally neceſſary even for children of only a year or two old. The ſaline draught with confect. aromatica, and muſtura camphorata is a good general

medicine; and if the fymptoms are more aggravated, the bark, volatile alkali, and the fpir. æther, vitriol. compofitus: bliſters alſo are often very uſeful. A ſtool ſhould be procured once in two days by means of a clyſter, or a little rhubarb; and plenty of drink be allowed, which may be lightly acidulated, and at times taken cool. The chamber ſhould be kept airy, but the child ſcreened from the wind, and be confined to the bed, until the raſh diſappears.

If on the raſh drying away, which in the milder ſpecies, is in three or four days, no freſh eruption ſhould take place, the appetite and ſpirits ſoon return; and only a little rhubarb, or other gentle laxative is required, with the uſual cautions in regard to diet, ſo neceſſary for every convaleſcent, and eſpecially children, who have no diſcretion of their own. But if freſh crops appear, and the fever returns, the former plan muſt be continued; but if without fever, a few doſes of phyſic, and quitting the warm bed will, probably, put an end to the complaint.

CYNANCHE PAROTIDEA, *or* MUMPS.

THIS is a tumour of the neck and throat, giving that peculiar caſt of countenance from which the complaint has acquired the Engliſh

name. It is usually only a slight disorder in children, but as it advances, the skin becomes inflamed, putting on a light damask-rose colour; but the parts very rarely suppurate, which is the more remarkable, as the disorder seems to be seated in the cellular or adipose membrane. This, however, does sometimes happen, but the abscess always heals kindly.

It is a complaint rather of young people than of infants; but frequently attacks children of five or six years of age. It is certainly contagious, and is often an epidemic disease. It begins with the common symptoms of fever, which are usually slight, but the tongue is frequently covered with thick fur, or is very white. The patient complains early of a stiffness and pain of the neck, and generally the next day of a soreness of the throat; but this seems oftentimes to be merely symptomatic, the tonsils being rarely inflamed. At this time, a fulness of the neck may be discovered, which gradually extends to the throat, and the parts become tender to the touch, and in some instances, the pain is exceedingly great, and recurs suddenly with almost regular intervals. The tumour generally continues to increase for two or three days, and then as gradually subsides.

In general, very little medical treatment is required, it being ſufficient to confine the patient to the houſe; at moſt, to give night and morning a few grains of the pulv. contrayervæ comp. with, or without, a ſmall proportion of nitre, and to procure a ſtool once in twenty-four hours. But ſhould an unuſual degree of fever attend, as is more common in ſuch as are advancing towards puberty, bleeding will be found neceſſary in the beginning, and the patient ſhould be kept in bed for the firſt or ſecond day, and take a ſaline draught with nitre, once in ſix or eight hours. On the other hand, ſhould it be attended with any uncommon languor, the conf. aromatica may be given inſtead of the remedies before mentioned. When the ſwelling is thoroughly ſubſided, two or three gentle laxatives may be adminiſtered at convenient intervals.

In a few inſtances, after ſuppuration has taken place, and the ſores are healed up, a hardneſs of the parotid and maxillary glands remains, which is uſually ſoon diſperſed by rubbing in a little mercurial ointment, or ſometimes by only anointing with the common linimentum ammoniæ. Should it, however, prove tedious, a few doſes of calomel, and common laxatives ſhould be exhibited, at proper intervals.

In adult males, or ſuch as are growing up to manhood, the tumour of the neck has ſometimes been found to ſubſide very ſuddenly without any abatement of the fever, and then the teſticles have been as ſuddenly inflamed; which is attended with more pain and fever than the ſwelling of the neck, and is cured more ſlowly: upon this metaſtaſis bleeding is always proper, though theſe parts have never been found to ſuppurate.*

A tranſlation from this part again, is ſometimes very ſuddenly effected, and the irritation then generally falls upon the brain; and the worſt conſequences are juſtly to be apprehended. Every thing neceſſary and proper for the true phrenitis is then ſpeedily to be had recourſe to, and the tumefaction invited to the parts it has left; and until that can be effected the patient will be in great danger. Such a metaſtaſis is much more common in *North America* than it is amongſt us.

HYDROCEPHALUS.

THIS complaint is diſtinguiſhed into the *external*, and *internal*; in the former, the water lies

* A ſwelling of the teſticles attended with pyrexia, but unaccompanied with any affection of the glands of the face or throat, was epidemic not long ſince at *Wallingford*, in *Berkſhire*, as reported by Mr. GOLDING.

upon the ſurface of the brain, over the pia mater, but in the latter it is ſeated much deeper, within the ventricles. The *external* makes its appearance at, or it is ſaid, in ſome inſtances, ſoon after birth; though it is certain, that children with hydrocephalus externus are more commonly ſtill-born. I have, nevertheleſs, known three arrive to full ten years of age,* who were then unable to walk, or even to ſit upright in a chair. From a late inſtance, however, I have learned, that when no ſymptoms of hydrocephalus appear at the birth, although the enlargement ſhould be manifeſt very ſoon afterwards, and increaſe rapidly, the water is *ſometimes*, at leaſt, contained within the ventricles of the brain:† and from the circumſtance of no children living long with an

* See *Medical Communications, vol.* 1, in which there is mention of two people then living, one of whom had attained the age of 29, and the other, 45 years: the former did not appear to have any enlargement of the head for three weeks after birth.

† In the *Medical Journal, vol.* 2. *p.* 1, an inſtance is related by Mr. E. FORD, of a child ſeized with ſymptoms of water in the head, at the age of nine years, who lived eleven months afterwards; during the laſt eight of which he was unable to ſtand upon his feet. After death, the ſutures were found to be ſeparated to a conſiderable degree, the ventricles containing eleven ounces of water, but there was no water exterior to the brain.

internal hydrocephalus, but ſuch whoſe heads enlarge within a few months after birth, I ſhould ſuſpect the diſorder has, in ſuch inſtances, taken place in the womb. The fetus, at this time, enjoying only a kind of vegetative life, may come to maturity under ſuch a diſeaſe; various inſtances being met with, in which full grown fetuſes have had neither head, nor heart, nor lungs. Accuſtomed to the above mentioned diſeaſe, we may preſume ſuch infants more likely to live for a certain time with water in the ventricles, than thoſe in whom the diſeaſe is ſuppoſed to take place, ſuddenly, after birth.

In the inſtance alluded to, the child's head began to be ſenſibly enlarged when the infant was about four months old, and the child lived to the fifth year, unable to walk, or even to ſupport its head. Upon a careful examination of the parts after death, the water, to the quantity of three pints, as I am informed by the ſurgeon, was evidently contained within the ventricles, which were ſo ſtretched as to compreſs the brain in ſuch a manner, that it appeared only like a ſmooth thick membrane within the dura mater; and of all the ſolid contents of the ſkull, ſcarce any thing, but the cerebellum remained. TULPIUS, HILDANUS, VESALIUS and MORTGAGNI have noticed the like in children from

two to five years of age; and it muſt therefore be ſtill more likely to happen where the hydrocephalus internus has taken place in the fetus in utero, when the brain is much more tender. Dr. WHYTT of *Dublin* likewiſe, mentions no leſs than three inſtances of the ſame kind, in which the brain was ſo compreſſed by the great quantity of water within the ventricles, as to put on the appearance of only a ſmall gland.

The *external hydrocephalus*, at whatever period it may commence, has always been eſteemed a fatal, as well as moſt diſtreſſing complaint; but I have been informed, that where the diſorder has not been very manifeſt at the birth, bliſters on the head have ſenſibly diminiſhed the bulk. Theſe ſhould be applied, ſucceſſively, to different parts, eſpecially along the top of the head, in the courſe of the longitudinal ſinus, ſo as to keep up a conſtant diſcharge; which from the good effects in two or three caſes, when had recourſe to in good time, may poſſibly, in ſome inſtances, effect a perfect cure: at leaſt, the advantages already obſerved are ſufficient to juſtify the attempt, in a diſorder hitherto eſteemed incurable.

Of the *internal* watery-head it may be proper to treat more largely. This melancholy diſorder ſeems not to have been diſtinctly known to the ancients, though there can be little doubt, it

muſt often have been met with; but the want of thoſe frequent examinations of dead bodies which the moderns have made, deprived them of thoſe opportunities of diſtinguiſhing this diſeaſe from affections of the head ariſing from other cauſes. HIERONYMUS MERCURIALIS,* who wrote in the beginning of the ſixteenth century, was perhaps the firſt who mentions the diſeaſe as having its ſeat in the ventricles. WEPFER alſo juſt ſays, that water has been found in the cavities of the brain.† BOERHAAVE, PETIT, and others have likewiſe ſpoken of it; but no author, I believe, deſcribed it at all accurately before Dr. WHYTT, who wrote expreſsly on the internal watery-head, anno 1768. But it has not been generally noticed, that the water lies ſometimes between the pia-mater and the brain, as it is found to do in maniacs; and I have met with it both there and in the ventricles, in the ſame ſubject, and always in infants under two years old.

The Hydrocephalus, indeed, is ſaid uſually to take place between two, and ten years of age; but I have known ſo many inſtances of water in the head being found after death, in children under two years of age, that this account of it,

* Opuſcula aurea, Lib. de Morbis Puerorum.

† Hiſtor. Apoplecticorum.

probably, is not very accurate. I have noticed this early appearance twice in the ſame family; the infants alſo dying ſuddenly without any previous mark of the diſeaſe: but as no dangerous ſymptoms of any other kind attended, it can ſcarcely be doubted, that the water found in the ventricles was in theſe inſtances the true cauſe of the ſudden death; as I am ſatisfied it hath ſometimes been in others, by producing a fit. This complaint, however, at whatever early period it may commence, is alſo found ſometimes to take place later than the tenth year. It is a like dangerous complaint with the hydrocephalus externus, and the method of treatment, not yet well eſtabliſhed; and as it can ſcarcely be aſcertained whether any have recovered from it, (the certainty of its exiſtence rarely being known but by examination after death) it is not likely that a very determined, and ſucceſsful treatment will ſhortly be ſettled.

It may ariſe from falls and blows on the head, from ſcirrhous tumours and excreſcences within the ſkull; a watery ſtate of the blood, or a lingering illneſs. It may likewiſe, probably, be owing to preſſure on the brain and fulneſs of the vaſcular ſyſtem from other cauſes, as conceived by Dr. QUIN. I have, at leaſt, met with one caſe, in which there were all the uſual ſymptoms

of water in the ventricles, and the late Dr. WARREN whom I met on the occaſion, was fully of that opinion. But upon examining the head thirty-ſix hours after death, a great number of ſharp points of bone were found, and eſpecially of the ſpinal proceſs of the os frontis, which was moſt uncommonly long and ſharp. The veſſels were all found very turgid with blood, and there were light, flakey appearances on the pia mater, ſimilar to thoſe found on the peritonæum, pleura, and other membranous parts in a ſtate of inflammation. In this caſe, only half an ounce of water was found in the ventricles. A ſimilar remark is made by Mr. EDWARD FORD,* who obſerves, that more remote cauſes may be an inflammation of the veſſels of the pia mater, which may owe its origin to the meaſles, ſmall-pox, ſcrofula and other complaints; which may affect the brain in the ſame manner they do the meſenteric and other glands. As the diſeaſe may originate from ſuch different cauſes, there can be no doubt that it may ſometimes be a chronic diſeaſe, and its appearances very inſidious. It appears, likewiſe, to be a family complaint in ſome inſtances; for I have known ſix children, born of the ſame

* *London Medical Journal*, Vol. 2, part 1.

parents, die fucceffively of it at the age of two years, five of whom were afterwards opened.—Children with a large head do not feem to be more fubject to this difeafe than other children.

The attack is fometimes very fudden; but the complaint more commonly begins with the appearances of flow fever, efpecially in older children, with debility of the arms, and pains in the limbs; and frequently in the upper part of the neck. After a while, the child is fuddenly feized with pain in the head, and generally in the fore part, and retches once or more: it becomes heavy and dull; can bear no pofture but that of lying horizontally; the pulfe becomes irregular, but ufually very flow: in the progrefs of the difeafe the faculties and fenfes are impaired, and the eyes are offended by the light; the patient fees objects double, and becomes delirious. As the difeafe advances, the pulfe grows frequent, the cheeks become flufhed, the pupils of the eyes are dilated, the ftools and urine come away involuntarily, and the patient lies fleeping, or is convulfed.

In the youngeft fubjects, I have known it begin with a cough, quick pulfe, and difficulty of breathing, attended with circumfcribed flufhed cheeks as in teething, recurring on every little exertion, with continual fever and coftivenefs;

and ſometimes a diſcharge from the noſe and eyes. Other ſymptoms indicative of the diſeaſe in very young ſubjects, are, a hand often put to the head, or lifted upwards, and waving about; vomitings; coſtiveneſs; expreſſion of anxiety, and diſlike to be moved; at other times, an unmeaning look, and marks of inſenſibility; the fingers often clenched, and hands tumid; drowſineſs; picking of the noſe, and grinding of the teeth during ſleep, as in the caſe of worms: the eyes are in ſome caſes impatient of light, in others, viſion is ſo imperfect that the child does not regard any objects however cloſe to them; and before this period, one or both the eyes are in many inſtances turned towards the noſe. The pupils are often not dilated till near the cloſe of the diſeaſe, and ſuch young patients ſometimes hear and comprehend, and take food to the laſt, and die ſuddenly upon the decline of the febrile ſymptoms, when they have been thought to be recovering. Theſe and other ſymptoms, however, laid down as indications of water in the brain, are, in ſome degree, common to other diſeaſes of children, eſpecially the dilatation of the pupil and ſleepineſs, in fevers ariſing from foul bowels, as will be noticed below; which, I am perſuaded, are ſometimes miſtaken for the fever of hydrocephalus. In ſuch caſes, ſome

children have been erroneoufly thought to have recovered from this difeafe, efpecially if calomel has been adminiftered, though with another view, while others have perifhed from improper treatment, and miftaking their complaint. Perhaps, the moft decided fymptoms early in the difeafe (at which time it is of the moft importance to afcertain it) are, an inclination to lie on the back, and unwillingnefs to be moved, and an increafe of pain in the head upon being raifed from a fupine to an erect pofture: but efpecially an almoft conftant drowfinefs, and a tendency to fall afleep, after being roufed by being lifted up, or otherwife difturbed. Sometimes, however, neither thefe, nor other decided fymptoms are found to take place until the fecond ftage of the difeafe.

Though it is fometimes a very fhort difeafe, and at others, of many months ftanding, it feems always to be divided into three ftages;* which are beft diftinguifhed by the ftate of the pulfe. In the firft, the pulfe is always quick as in other complaints attended with fever; in the fecond, it is flow, irregular, and often intermitting; and in the third it becomes again very quick, and ufually regular. The urine frequently depofits

* See a Treatife on this difeafe by Dr. CHARLES WILLIAM QUIN. *Anno* 1790.

a ſediment of a light conſiſtence, and white colour; and the breath has an offenſive and ſickly ſmell, eſpecially in the laſt ſtage.

From what has been advanced, it is difficult to ſay if medicines are ſo often ſucceſsful as hath ſometimes been imagined; for when a patient recovers, it has been ſaid, it may be ſuſpected he has not had the true diſeaſe. I offer this ſuſpicion as well from my own experience, as from the doubts entertained by other writers; having ſometimes been perſuaded, (and ſupported in that opinion in conſultations) that infants have been ill of water in the head, who have afterwards recovered from the uſe of medicines adapted to fever from a foul ſtate of the bowels. Two ſuch children, beſides the dilated pupil and other uſual ſymptoms of hydrocephalus, loſt the uſe of their ſpeech, (and one of them, of the ſight) for ſeveral days; but recovered after a daily diſcharge of very uncommon ſtools, reſembling the meconium of infants. And it is very remarkable, that only calomel brought theſe away; the experiment being repeatedly made by omitting it, and giving only the infuſion of ſenna: but upon the calomel being exhibited again, the ſame ſtools were always obſerved, as black and adheſive as meconium,*

* Stools of this *colour* take place in the month, long after

and in very great quantity, until the children perfectly recovered.

Whatever may have been ſuppoſed to be the immediate cauſe of hydrocephalus, practitioners ſeem chiefly to have depended on repeated bleedings; purges with jalap, or calomel; bliſters to the neck, or head, diuretic medicines, and the external uſe of mercurial ointment. A large bleeding early in the diſeaſe I have thought very beneficial, eſpecially in children of a robuſt habit. The uſe of ſternutatories, as the compound powder of aſarum, or white hellebore, have likewiſe been recommended by ſome experienced practitioners: and poſſibly, with ſome little proſpect of advantage, ſome children having recovered in conſequence of a diſcharge of a thin fluid by the noſtrils, as Dr. HARVEY acquainted me he had ſeen in two inſtances. With a view to promoting abſorption, electricity has likewiſe been recommended: to all which I would add the application of a narrow cauſtic upon the head, along the whole courſe of the longitudinal ſinus, inſtead of truſting to a ſmall bliſter on the crown.

the meconium ſeems to have been duly carried off, when infants are very dangerouſly ill; though it is at other times a very harmleſs ſymptom, as will be noticed in vol. iii. where notice is taken of ſuckling, and ſore-nipples.

Though I have made mention of mercury, I cannot ſay I have ſeen any decidedly good effects from its uſe, either as a purge or an alterative (after the diſeaſe has been clearly aſcertained;) adminiſtered either externally or internally, though I have had recourſe to it very early as well as late in the diſeaſe. Should the uſe of it, however, be determined upon; in which ever way it may be adviſed, it ſhould be aſſiſted by diuretics. Calomel is probably the fitteſt preparation for internal uſe; though the quickſilver, together with diuretics, has been thought to be adminiſtered with ſucceſs in the following form, to infants of two or three years of age.

℞. Confect. Aromat. ʒj.
Hydrargyr. purif. ℈j.

Simul terantur donec globuli viſum fugerint.

℞. Maſſæ ſuprapræſcriptæ ℈ ß.
Pulver. Scillæ gr. ß.
Aquæ Menth. ſativæ ℥ ß.
Spir. Æther. nitroſi gtts. x.
Miſce,

Fiat hauſtus, bis terve in die ſumendus.

The external application of mercury has however, been more generally preferred, as acting more powerfully on the ſyſtem, and creating leſs diſorder in the bowels. Some phyſicians have directed it to be uſed both externally and

internally; and it may ſo be made uſe of very freely, as a ſalivation is not very eaſily raiſed in young children, eſpecially in this diſeaſe.

Though I have ſaid that I cannot boaſt of ſucceſs in the recourſe I have had to mercury, it is proper, however, to obſerve, that it has been ſtrongly recommended by Drs. CARMICHAEL SMYTH, DOBSON, JOHN HUNTER, HAYGARTH, MOSELY, and Dr. ARMSTRONG; but I am informed by other phyſicians of eminence, that they have not been ſo ſucceſsful in the uſe of it; and ſome good arguments have lately been advanced againſt an indiſcriminate recourſe to it, by Dr. JOHN WARREN; who adviſes trial to be made of emetics.

The digitalis purpurea has lately ſuceeded in one inſtance, and that a moſt unpromiſing one; the patient a youth about fourteen years of age, having been ſome time greatly convulſed, and able to ſwallow only with great difficulty. This medicine was given in a ſtrong tincture, half an ounce of the dried-leaf being infuſed in two ounces of brandy, of which from five to twenty drops were taken once in five hours. It acted, as uſual, very powerfully as a diuretic, but without producing any unfavourable ſymptoms, and though it was long ago given unſucceſsfully in ſome inſtances, by the late Dr.

FOTHERGILL, may be worthy of further trial; but ſhould generally be joined with aromatics.

As I am always happy in the opportunity of reflecting any light upon obſcure diſeaſes, I ſhall cloſe theſe means of cure with ſome obſervations from Drs. PERCIVAL* and TEMPLE, as well as from Dr. RUSH, and ſince confirmed by Dr. PATERSON; but not having had experience of their efficacy, I offer them only as the ſentiments of the ſeveral writers.

The latter is decidedly of opinion, that the commencement of this diſeaſe is always truly inflammatory, being what he calls a phrenicula, or diminutive ſpecies of phrenitis, and that it ſhould be treated boldly as an acute diſeaſe: the aqueous effuſion, he is perſuaded, being the mere effect of inflammation: the tender ſtructure of the brain, during infancy very probably rendering that viſcus more liable to ſuch a conſequence than it is at a more advanced age.

Dr. RUSH ſpeaks of great ſucceſs in treating the complaint agreeably to this idea, and adviſes;

1ſt. Bleeding, which in ſome caſes he directs to be repeated ſeveral times in the firſt ſtage of the diſeaſe.

The ſecond remedy in this ſtage is, purging, plentifully and repeatedly; to which he was firſt

* See *Medical Facts*, vol. 1.

encouraged from the benefit derived from that remedy in palfies, and other cafes of congeftion in the brain.

3d. Blifters to the head, neck and temples, for the relief of the pain in the head; which are, therefore, proper in any ftage of the diforder.

4th. With the like view, linen cloths, dipped in cold vinegar, or ice-water, and applied to the forehead.

5th. Mercury, particularly calomel, as a purge, in any ftage; but mercury in larger quantities, as a ftimulant, as foon as may be after the inflammatory action of the fyftem is fufficiently fubdued by previous evacuations, or otherwife. Bark, wine and opium, he fays, promife fuccefs only in the laft ftage of the diforder, affifted by mercury, where the ftate of the fyftem may call for them.

If we may place much confidence in thefe obfervations of Dr. RUSH, whofe theory appears to be fupported by plaufible reafoning and the hiftory of feveral fuccefsful cafes, fome further light feems to be thrown upon this dangerous difeafe; and the indications for the antiphlogiftic plan, particularly bleeding, and the proper ufe of mercury, pointed out with fomewhat more precifion than hitherto.

The chief doubt remaining, is, that his pa-

tients may have recovered from ſome very different complaint, particularly fever from foul bowels; in which it has been ſaid, both the head and eyes are often greatly affected. And this may be the more apprehended, from many of thoſe who die of hydrocephalus being very tender, and previouſly ſickly children, who can neither endure much evacuation of blood, nor much purging; and in whom, indeed, there are no ſymptoms of congeſtion either of ſolid feces, bile or other alvine ſtimulant.

The intentions of cure as laid down by Dr. PERCIVAL are very ſimilar to the foregoing, being calculated, he ſays,

To mitigate the pain and ſpaſm;
To promote abſorption; and
To increaſe the ſerous excretions.

When the pain and ſpaſms are conſiderable, he adviſes opiates in large and repeated doſes, unleſs there be coma, and in that caſe, he ſubſtitutes muſk combined with ſal cornu cervi. He directs repeated bliſters to the head, and recommends joining the digitalis with opium and calomel; though he is inclined to think, that the good effects produced by this compoſition are rather attributable to the combination of the opium and calomel, than to the digitalis. If

the mercury be diſpoſed to run off by the inteſtines, he guards it further by opium.

Dr. TEMPLE* having obſerved, that the doronicum germanicum adminiſtered in ſome paralytic affections was diſpoſed to excite the cuticular veſſels in the head, in a very extraordinary manner, producing a copious ſweating of the part, was led to adviſe it in hydrocephalus internus; and in a recent inſtance with marked ſucceſs, in conſequence of an abundant perſpiration from the head. Opium and calomel were, indeed, joined with it, but as it is not known, he ſays, that ſuch effects have been produced from the combination of mercury and opium, he concludes, that the doronicum had a conſiderable ſhare in them.†

As a prophylactic, or preventive, where ſeveral children in a family may have ſuffered by it, ſome writers have adviſed a cauſtic to be applied to the nape of the neck. And other phyſicians have thought, that the progreſs of the diſeaſe has been ſtopped, after threatening ſymptoms had taken place, by covering the whole crown of the head by a bliſter, and keeping the

* See his *Practice of Phyſic.*

† It hence appears, that Dr. TEMPLE had not ſeen Dr. PERCIVAL's remarks on this diſeaſe—How very differently do men oftentimes argue from the ſame fact!

ſore open for a year or more; of the good effects of which, I have ſeen one inſtance, in a family where the complaint had been three times fatal.*

General Observations *on the* Small-pox *and* Measles, *with* Cursory Remarks *on* Inoculation.

It will ſcarcely be expected, that I ſhould treat diſtinctly of theſe diſeaſes in their ſeveral varieties, being in no reſpect peculiar to childhood, nor of a nature to demand a full inveſtigation in a work of this kind; and are noticed only to point out a few principal indications, and to introduce ſome practical obſervations in regard to Inoculation.

Though the Small-pox is a complaint ſo in-

* It may be worth noticing in this place the manner of making a perpetual bliſter, or what is called a perpetual iſſue, at *Edinburgh;* which is, by applying a plaſter, conſiſting of equal parts of eplaſtrum veſicat. and cereum. This it is ſaid, does not eraſe the cuticle, or erode the parts under it, but leaves them entire, and lets the hair grow up. As theſe, in ten or twelve days, puſh off the plaſter, it is neceſſary to leave off the plaſter, and as ſoon as the ſkin can bear the razor, to ake off the hair, and apply a freſh plaſter. This gives leſs pain, is free from the inconvenience uſually attending the bliſtering plaſter, where the cantharides is abſorbed, and gets into the blood, whereby a ſtrangury is brought on.

cident to the early part of life, that comparatively few children living to the age of eight or ten years are found to eſcape it, yet it is not ſo readily communicated, in the ſtate of *early infancy*, as hath been generally imagined, unleſs by immediate infection.* This is equally true

* Some evidence of the propriety of this aſſertion may be gathered from the conſideration of there always exiſting a far greater number of infants within the month, than of children of any other age; and for the like reaſon, a greater number of thoſe under a year old, than of ſuch as are two or three years of age. For it is evident, that every infant dying at the earlier periods, muſt reduce the number to which thoſe of the more advanced ages might otherwiſe have amounted; whereas, all the children who arrive to two or three years of age, having been firſt infants in the month, and of one year old, the number of the latter periods is not diminiſhed by the death of thoſe of a more advanced age. Now, every one knows how very few infants he has heard of who have received the ſmall-pox, naturally, in the month, or even within the year; though fewer of theſe are inoculated than of children above a year old. And this exemption from the natural ſmall-pox does not ſeem to ariſe from their not being expoſed to the ordinary means of contagion, eſpecially among the middling and lower ranks of people, who form the bulk of mankind; ſince the medical men who uſually attend ſuch lying-in rooms, are very much in the habit both of viſiting patients in the ſmall-pox, and of inoculating, all the year round: and even in the higher ranks of life, if gentlemen in the general practice of phyſic happen to be conſulted, the chance of their viſiting at the ſame time infected patients, is not ſo ſmall as may be imagined; not to ſpeak of the proba-

in regard to many other diseases, as I have noticed elsewhere, and the principle may very probably be, as conceived by Mr. KITE, that the younger and weaker the subject is, the less of life it possesses, and the less susceptibility it has for these complaints.

The poor furnish frequent instances of the truth of this observation. I have attended where children born in an air, saturated as it were, with the miasma of this disease, (as well as of the measles) and even lying continually in a cradle in which another child has died a few days before, have, nevertheless, escaped the disease, and sometimes, when they have slept together in the same bed with one loaded with it. Hence it appears, that highly tainted air, and even personal contact, are often insufficient to communicate the virus. Yet we know that infants are very easily infected, receiving the small-pox by inoculation as readily as adults; though neither are at all times equally susceptible of it.*

bility there is, that some one of the numerous visiters, during the month, may by accident or otherwise, have been in some infected house in the course of the day in which their visits may be made.'

* Dr. YOUNG inoculated several children at the Royal Infirmary at *Edinburgh* at about a week old; yet in none of them could he perceive the infection to take place. And a

Perhaps this latter circumſtance may not always be ſufficiently attended to; the mode of inoculation being often blamed, when its failure may be owing to the indiſpoſed habit of the child. Poſſibly, on this account, it may not be perfectly ſafe to urge it, at ſuch a time; at leaſt, inſtances are not wanting, where twice introducing the virus having failed, an infant has had the diſeaſe very ſeverely, and even fatally, upon its being repeated a third time.—In no other view, I imagine, can the repetition be accounted hazardous; and this holds out encouragement to ſuch as from any uncertainty in regard to infection, may wiſh to be inoculated once or more; Dr. RICHARD DE HAUTEFIERCY* having inoculated a young perſon every fortnight, for a whole year. The firſt of theſe operations communicated the diſeaſe, and the ſubſequent ones in no wiſe injured his health.

But in whatever way the ſmall-pox or meaſles may take place, they are to be treated as in

reſpectable phyſician lately informed me, that he knew a young woman to be inoculated eight times in the courſe of thirty days, who alſo at the ſame time attended ſeveral children who had the ſmall-pox from inoculation, and yet was not infected herſelf. She, neverthelefs, caught that diſtemper about ſeven weeks afterwards, and died of a confluent ſort.

* *Nic. Roſen-von Roſenſtein.*

adults, with but little other difference than what every practitioner is well acquainted with, that of greater caution and tenderneſs; as infants cannot bear the powerful antiphlogiſtic regimen and evacuations, often proper for the other.*

In regard to the diſeaſe itſelf, it may juſt be obſerved, that in the mild diſtinct ſmall-pox the eruption does not appear till the fourth day, incluſive from the attack; but in the ſevere, confluent kind, on the third, and even ſometimes early on the ſecond day. In the former alſo, the fever and other complaints uſually vaniſh upon the eruption appearing on the ſkin, whereas in the confluent, however, it may abate for a ſhort time, the fever is rekindled, and increaſes with the progreſs of the diſeaſe. There are likewiſe ſome peculiarities in regard to young children, both in the mode of attack, and in the ſymptoms attending the latter ſtage of the diſeaſe, which may be ſlightly noticed in this place. The vomiting, ſhivering, and pain in the back, and head, being rarely ſucceeded by a ſweat in infants, and is far leſs common in all young children than adults, under any of their complaints, and is leſs commonly ſalutary, or critical. In the progreſs of the diſeaſe there is like-

* Ex toto, non ſic pueri, ut viri, curari, debent. CELSUS. *Lib.* iii. *cap.* 7. *p.* 134.

wiſe as frequent a difference, children having uſually a purging in the bad confluent ſort, in the place of that ſalivation which uſually appears in adults. Theſe circumſtances, as well as their tender age, will call for ſome little diverſity in the treatment; with all which, however, the reader is ſuppoſed to be acquainted, who will be careful to make proper diſcriminations in this complex diſeaſe.

In regard to the MEASLES it needs only to be remarked, that not only ought the belly to be kept open throughout the diſeaſe, and cooling medicines, and diluting drinks be adminiſtered; but unleſs the children be very young, they will bear and even require one or more bleedings, at any period of it when the ſymptoms indicate its propriety.* And, indeed, the cure of the ſe-

* In all caſes of local inflammation, or tendency to it, topical bleedings ſhould have the preference, eſpecially if it be not neceſſary to take away a large quantity of blood, (which it can rarely be in young children;) or if the operation be often repeated. In the preſent inſtance, therefore, if the child be very young, or very weak, it may be ſufficient to draw off a little blood by leeches, from ſome part about the cheſt. But ſhould it be deſigned only to leſſen the quantity of the blood, they may be more conveniently applied to the leg, or arm, as the child will be leſs expoſed to taking cold during their application; and if the leeches ſhould not draw well, thoſe parts can afterwards be com-

condary fever, and cough, however long they may continue, will turn upon repeated bleedings, laxatives, and a total abſtinence from wine, and all animal food.—It may be juſt remarked, that inſtances occur even in the benign meaſles, of the eruption continuing much longer than four days before it begins to dry off.

I have now only to drop a word or two more on the ſubject of *Inoculation*, and principally, becauſe parents are very apt to fall into great miſtakes reſpecting the age, and circumſtances moſt proper for this operation, and ſometimes draw medical people into an imprudent compliance.

It is too common an opinion that a very young infant, ſucking at the breaſt, is the fitteſt ſubject for inoculation. Children are then ſaid to be clear from humours, their blood mild and balſamic, their food innocent, and their minds free from all violent paſſions. But all theſe advantages may be counterbalanced by the delicacy of their frame, their diſpoſition to ſpaſm, and their inability to ſtruggle with a ſevere attack of the diſeaſe, if it ſhould chance to fall to their ſhare. And ſuch, indeed, are the facts:

modiouſly immerſed in warm water to promote the bleeding; or a bandage may be eaſily applied to reſtrain it, if it ſhould prove too profuſe.

infants uſually have the ſmall-pox very lightly, whether taken naturally, or from inoculation, though in both there are a few inſtances of their expiring in a fit at the time of the eruption; and they ſeldom get through the diſeaſe, if they are full, or it proves of the confluent, or malignant kind. And this furniſhes a peculiar objection to inoculating infants at the breaſt, which ariſes from their neceſſarily lying ſo much on the arm of the ſuckling mother, or nurſe, eſpecially in the night; the heat expoſing them to a much more copious eruption, than children who are weaned. This I have ſeen clearly exemplified in the inſtance of a child whoſe mother could ſuckle only with the right breaſt; the conſequence was, that the left ſide of the child was perfectly loaded with the eruption, (though the pock was of the diſtinct kind) whilſt the other had only a moderate ſprinkling. The child, however, ſunk under the ſecondary fever at the end of five or ſix weeks, though turned of two years old; the *only* child I have known to die of inoculation at ſo advanced an age. A ſimilar inſtance is related by Mr. Moſs; who not being able to prevail on a young woman whom he had inoculated, to keep her feet (which were very cold) out of the warm aſhes of a hearth-fire, at the time of the eruption, they were, in conſe-

quence, ſo loaded with it, as to appear one continued bliſter; though the diſeaſe was very diſtinct, and went on favourably in other parts.

I am aware that many children are inoculated very young, and even in the month, and generally with very good ſucceſs; but the frequency of this practice, among eminent ſurgeons, is owing to the urgent ſolicitation of parents, and their fear of contagion. I cannot therefore avoid ſaying, that however few may die under inoculation, under any circumſtances, the fact is, that the far greater proportion that I happen to have had an account of, is amongſt infants under ſix months old. A remarkable proof of this diſproportion appeared a few years ago under a general inoculation at *Luton*, during the progreſs of a malignant ſmall-pox; which had carried off one half of thoſe who were attacked by it in the natural way. In the midſt of this fatality, twelve hundred and fifteen paupers were inoculated, through the humanity of the preſent Biſhop of St. *David's*,* many of whom refuſed all preparatory medicines, and were beſides addicted to the uſe of ſtrong liquors: nevertheleſs, out of the *twelve hundred and fifteen*, only *five* died—*all of whom were infants under four months*

* See a Tract on *Malignant Fevers*, by the late SIR WILLIAM FORDYCE, 1790.

old.—Seven hundred adult people of better condition, in the ſame neighbourhood, were inoculated a ſhort time afterwards, and with the like good ſucceſs with the former.

From this view of the matter, it is pretty evident, I think, that this operation ought, in general, to be poſtponed to a later period, which is pointed out by the child having cut all its firſt teeth. To which may be added the obſervation juſt made, that infants are not much diſpoſed to take the ſmall-pox naturally; and that more than fifty children die under the age of two years, of other complaints, to one that dies of the natural ſmall-pox. Should it, however, be in the ſame houſe, or prevail in the neighbourhood, and the parents find it difficult to remove the child out of the way, it may run a leſs riſk in being immediately inoculated, as that operation is now ſo well underſtood, and ſucceſsfully conducted, than by taking the chance of eſcaping the infection, or of recovering from the diſeaſe, if it ſhould happen to take place. I ſhall juſt obſerve, however, on this head, that the late PROFESSOR MONRO, ſeems to recommend the uſe of a bath of water and juniper-berries, and fumigating the chamber with the juniper-tree, during the courſe of ſevere ſmall-pox; which is ſaid to have ſucceeded in eight or nine inſtances as a preventive.

The inoculation of pregnant-women being, in certain inſtances, dangerous to the infant, it is preſumed, that it cannot be totally foreign from the ſubject, to annex a caution on that head; it having until of late been generally imagined, that the child is not infected by the parent paſſing through the ſmall-pox, whether from inoculation, or otherwiſe. It is, indeed, comparatively rare, that the unborn fetus takes the diſeaſe, howſoever ſeverely the mother may ſuffer by it; yet from a very accurate account of this matter lately publiſhed by Dr. PEARSON, and ſome caſes by Meſſrs. C. KITE *of Graveſend*, and W. TURNBULL, the fact is eſtabliſhed as the reſult of much experience and reflection, where the parent has been infected after the ſixth month of geſtation. Previous to that period, however, the fetus (whatever be the cauſe) has very ſeldom been known to take the diſeaſe; and later than that, it is preſumed, few mothers would be inclined to ſubmit to the operation, unleſs from ſome urgent neceſſity. The parent, it is added, is not in much additional danger from being inoculated in a ſtate of pregnancy, unleſs the diſeaſe ſhould prove conſiderably more ſevere than it is ever expected, from inoculation; but when communicated to the fetus, the infant always dies. An inſtance of

infection at an early period of gestation, has lately been adduced by Mr. RUMBALL of *Abingdon*; the fetus taking the infection when its mother had only completed the fourth month of gestation. She was then seized with the natural small-pox of a bad confluent kind, and recovering with difficulty, was delivered, at the end of the seventh month, of an infant who bore strong marks of the disease, and survived only half an hour.

In regard to inoculation of the *Measles*, it may just be noticed, that Dr. FRANCIS HOME is said to have practised it, in several instances, with success, and that Dr. ROSENSTEIN seems to intimate the example having been followed in *Sweden*.*

VARICELLA, *or* CHICKEN-POX.

THOUGH this disease is, indeed, usually a very light one, it merits a few words, not only because more incident, perhaps, to children than to adults, but also that it is sometimes mistaken for the mild small-pox; which it sometimes exceeds in violence, and is now and then even attended with danger. This is, indeed, so uncommon, that the disease has been very seldom noticed by medical writers; and even Dr. HE-

* Treatise on the *Diseases of Children*. 1771.

BERDEN, who was among the firſt that obliged the public with a diſtinct account of it, ſays he never ſaw any perſon with ſo many as three hundred puſtules over the whole body. Phyſicians, indeed, as he obſerves, are not often called to viſit patients under a complaint uſually ſo trifling, or a gentleman of his long and extenſive practice, would have met with inſtances in which it muſt have appeared of more conſequence, as will preſently be noticed.

It is from this diſparity, I apprehend, that this diſorder is ſometimes denominated the ſwine-pox, which is only a ranker ſpecies of the diſeaſe, in which the ſymptoms may run higher, as well as the puſtules become much larger, and more purulent. In this caſe, I have known the head and face as much ſwollen as I have ever ſeen them in any diſtinct ſmall-pox, however full, and the puſtules containing a yellow matter, with highly inflamed baſes, and exceedingly ſore; and theſe have formed a complete maſk on the face, after the turn, as is often ſeen in the ſmall-pox. One ſuch patient whom I was called to viſit, was about ſixteen years of age, of a plethoric habit, but very healthy; and what makes it very certain, that this complaint could not be the ſmall-pox, is, that the young gentleman died of that diſorder a twelvemonth afterwards, and poſſibly

owing to its being neglected in the beginning, from an idea that the former illneſs had really been the ſmall-pox. The latter miſtake aroſe from an improper anſwer having been then made to my inquiry after the day on which the eruption had firſt appeared, (as I was called to make him only one viſit, when the pock was on the turn;) a miſtake the young gentleman's mother had a perfect recollection of after I was gone, and of which I reminded her upon being called to viſit her ſon in the ſmall-pox, only the day before his death.

This caſe ſtrongly verifies the remark of Dr. HEBERDEN, that this complaint can, in ſome inſtances, be diſtinguiſhed from the ſmall-pox only by its quicker progreſs towards maturation, and the ſhorter duration of the puſtules; a watery veſicle always appearing on the ſecond or third day from the eruption, and the turn, at the furtheſt, taking place on the fifth. In young children, a teazing cough ſometimes comes on about the time that the eruption is complete, and continues until two or three doſes of phyſic have been taken, which on account of the cough ſeems to be neceſſary.

The ſymptoms preceding the eruption are ſometimes ſo ſlight, that even where the eruption has proved pretty conſiderable, the diſorder

has not been expected so soon; though from its being in the family, the closest attention has been paid to it.

The Treatment of it differs nothing from that of the mild, distinct small-pox; but it more rarely calls for much attention, and only when a patient may have it very full; or, as sometimes happens, a second crop appears, after the first has dried off.

AGUE.

THIS is a complaint so well known, that it seems unnecessary here to enter minutely into a description of it. It is sufficient to say, that it consists of repeated cold and hot fits regularly succeeding each other, with one or more well-days between them; in which interval the sick passes a high-coloured urine, that deposits a red sediment.

It, perhaps, partakes more of a nervous affection than other fevers may do, and is known to be endemic in some flat marshy situations, but is most frequent in the spring and fall of the year; in the former of which it is generally easily cured, and is even sometimes salutary. Autumnal agues, on the other hand, especially in the country, and amongst very poor people who feed coarsely,

will frequently continue a long time, and return again the next autumn; whereby the conſtitution becomes conſiderably impaired. In ſuch inſtances the legs are apt to ſwell, and more eſpecially the belly, which becomes hard, particularly on the left ſide, and has been termed the ague-cake. This tumefaction, however, inſtead of being a bad ſign, as might be ſuſpected a priori, is a very favourable one, and indicates the recovery of the patient. This circumſtance is noticed by SYDENHAM, and like other obſervations of that attentive practitioner, is a very juſt one, and was, doubtleſs the reſult of his experience. The hardneſs is probably owing to an infarction of the ſpleen, and uſually ſubſides in the courſe of a few months, eſpecially upon the uſe of moderate exerciſe, and a generous diet. It may be prudent, however, to adminiſter ſmall doſes of calomel, and afterwards light bitters, adding likewiſe chalybeates, if the habit of the patient ſeems to require them, and there are no ſymptoms of a morbid affection of the viſcera.

It were needleſs to enter largely into the ſubject, and it is equally foreign from the preſent intention, to be more particular in regard to the cure of this oftentimes very troubleſome complaint. Some notice of it, however, is taken, becauſe though no more peculiar to children

than the laſt mentioned diſeaſes, yet it may be ſaid, that there are comparatively very few children who have not ſuffered by it during the years uſually paſſed at ſchool.

The ague, indeed, attacks every age, ſo that infants even under a year old are very liable to it, whenever it rages among adults. It is with a peculiar view to patients of the former claſs that the following directions are given, the bark being uſually a ſpecific for older children and grown people; to whom, however, it is generally proper firſt to adminiſter a vomit, and one or more doſes of phyſic, as well as ſometimes to aſſiſt the bark by the addition of aromatics, or ſteel.—The ſmall-pox, whether taken naturally, or by inoculation, as well as other acute complaints, has ſometimes removed obſtinate autumnal, and chronical agues.

In a ſtate of infancy, the ague is often owing to, or connected with a foul ſtate of the bowels and obſtruction of the biliary ducts, and is frequently accompanied with worms, or ſuch a ſtate of the alimentary canal as affords a proper nidus for them.

The tertian, or more common ague, at this age generally yields to purges of the pulv. è ſcammon. c. calomelane, or calomel and rhubarb, given on the days between the fits, and

ſmall doſes of the pulvis antimon. on the return of the fever. Should this fail, a vomit ſhould be adminiſtered an hour or two before the next cold fit is expected, if the powder ſhould not already have had that effect.—A linen waiſtcoat with fine powder of bark quilted within it, may be worn by infants next their ſkin. But a more expeditious remedy is a large poultice of Peruvian bark, put between thin linen, and applied warm to the region of the ſtomach, and renewed through the day as often as it may get cool.*

In older children, the common ſaline draught, taken once in ſix or eight hours, will frequently ſucceed; as will warm bitters, and medicines that promote and keep up perſpiration. Crude ſalt ammoniac alſo in the doſe of ten or twelve grains, for children of five or ſix years of age, has ſometimes cured this troubleſome complaint; but may not be proper for delicate conſtitutions. Myrrhe is a better remedy for ſuch, given from four to eight grains, before, or during the cold-fit, and as much cream of tartar, every two or three hours, during the fever. Pepper, and likewiſe alum are common quack remedies, and may be frequently given with ſucceſs at this age; the former from five to ten grains, the

* See *Roſenſtein* on the diſeaſes of children; alſo *Med. Obſerv.* and *Inq.* vol. 2. p. 255.

latter from three to five, joined with the like quantity of nutmeg, three or four times a day in the abſence of the fever. Another good remedy is flowers of brimſtone, given in the quantity of a table ſpoonful in a glaſs of brandy, before or during the cold-fit; this is a proper doſe for adults, but I have never adminiſtered this medicine to children.—Theſe remedies are ſuppoſed to be beneficial by producing a different action of the parts.

Amongſt popular remedies,* is a tea-ſpoonful of white reſin in fine powder, mixed with the like quantity of pounded loaf-ſugar, taken a little before the cold-fit, and repeated afterwards night and morning: this I have found ſucceſsful even where large doſes of the bark have failed. Bracelets of muſtard-ſeed and garlic have likewiſe been applied to the wriſts and ancles, and upon the teſtimony of Dr. G. FORDYCE with good effect. Such kind of remedies for this diſeaſe are numberleſs; I ſhall, however mention another, which, though as anile as any, ſeems to have been very often ſucceſsful, (as I have been informed by the late Dr. HUCK SAUNDERS, as well as others;) and is nothing more than the ſpider's web, rolled looſely up to the ſize of a

* The occaſional obſtinacy of this complaint is offered as the apology for ſuch kind of preſcriptions.

child's marble, and washed down with a little warm wine and water, or chamomile tea, before the cold fit is expected: the child ſhould then be put into a warm bed, and perſpiration be encouraged. This may be done, amongſt other means, by fomentations to the pit of the ſtomach. A piece of bread, hot from the oven, and ſprinkled with camphorated ſpirit, is not a contemptible one, in this and other complaints, where a ſpeedy perſpiration is wiſhed for.

I ſhall cloſe the liſt of remedies with the following from Dr. KIRKPATRICK, which is a very good one for patients no otherwiſe averſe from the bark, than that the ſtomach will not bear it in large doſes.

Take of freſh ſaſſafras bark, Virginia ſnakeroot, roch-alum, nutmeg, calcined antimony, and ſalt of wormwood, of each one dram: to theſe, well rubbed together into a fine powder, add the weight of the whole of the beſt Peruvian bark; then add three or four drops of the chemical oil of mint, and with ſyrup of ſaffron make all into the conſiſtence of an electuary. This is to be divided into twenty-four doſes, one of which may be taken by children of eight or ten years of age, every four or ſix hours, while the patient is awake. To make this or any other preparation of the bark ſit eaſy on the ſtomach, the patient

ſhould firſt eat a bit of bread, or other light food, with which it may mix, inſtead of being received into an empty ſtomach, whereby it frequently nauſeates.

GENERAL OBSERVATIONS *on* COUGHS.

PREVIOUSLY to treating of the hooping, and what I have termed the ſpaſmodic cough, it may not be unwelcome to ſtudents in medicine, that I ſhould premiſe ſome ſlight obſervations on coughs in general; a complaint in children that we are often conſulted for. It is, indeed, always of importance to be able to make proper diſtinctions in this affection, as it accompanies divers complaints, eſpecially in infancy; and is ſometimes a very harmleſs attendant, while at others, it is of the greateſt magnitude, and calls for its appropriate treatment from the beginning. My remarks here, however, will need only to be very brief.

From what has been ſaid in different parts of this work, it will be very evident, that a cough is not always to be conſidered as the original complaint, like the hooping-cough, any more than a direct conſequence of a cold, or of ſpecific pulmonary affection, as in the meaſles. Where it may happen to be ſo, enough, it is

prefumed, has been faid under the head of fevers; and the hooping and fpafmodic coughs will be prefently treated of diftinctly. The intention here is principally to remind the reader, that a cough often attends teething, and fome bowel complaints, or a foul ftate of the ftomach, as well as a common cold, and inflammatory and other fevers, (which, however, are often fufpected whenever children are attacked with a cough;) and is a recurring fymptom in many delicate habits. Very flight occafions are oftentimes fufficient to excite it in fuch children, whether from a frofty or damp air, or from any little illnefs that has reduced the ftrength, and particularly if the child be of a fcrofulous habit. Every confirmed glandular affection will, indeed, be attended with a cough, which in that cafe is of the worft kind, as it is attended with fever, lofs of ftrength and manifeft difeafe; in the laft ftages of which the cough becomes permanent.

In every cafe, therefore, the caufe and attendant fymptoms, rather than the mere cough, fhould be carefully attended to, and efpecially if the child be coftive, or the bowels foul, and their difcharges of an unufually offenfive fmell. Purging medicines, it has been before faid, are in this cafe the proper remedies, which fhould

frequently be joined with saponaceous ingredients, ſuch as the aqua kali, natron ppt. or ſpong. uſt. nothing being more common than an obſtinate and teazing cough, eſpecially during the night, when the bowels have been long in a coſtive ſtate, and the alvine diſcharges are very fetid, or of a ſtiff and clayey conſiſtence.

Though I have ſaid, my intention has been rather to diſcriminate the cauſes, than to direct the preciſe remedies for coughs; yet it may not be amiſs to give a few ſuitable preſcriptions for coughs attendant upon common colds, eſpecially after the period of early infancy. And to this I am inclined, on account of the more ordinary remedies met with in books being uſually of the oleagenous kind, and ill ſuited to the ſtate of ſtomach in young people, and, indeed, not always well adapted to adults.

℞. Mucil. gum. arab. ℥ijj
Mellis acetati ℥i ß
Aq. diſtilatæ ℥x
Syr. papav. albi ℥ij ft miſtura.

addatur P. R. N. ſpir. æther. nitroſi gtt. xij.

℞. Pulv. è tragacanth. comp. ʒj
Syrupi Limonis ʒ ß
Papaveris albi
vel mororum ʒ i ß
Spir. ætheris nitroſi ℥ij

Misce, ft. Linctus.

℞. Mellis acetati ℥j
Syrup. papav. albi
———mori āā ℥vj
Tinct. Tolutan. gtt. xx misce.
Fiat Linctus.

PERTUSSIS, or HOOPING-COUGH.

THIS complaint, called also tussis ferina, is a disease unknown, probably, to the old writers; and is supposed to have been conveyed into *Europe* from *Africa*, or the *East-Indies*: the *Greek* and *Arabian* physicians make no mention of it, and indeed it has not been well understood in any part of *Europe*, till of late years. Hence, probably, its great fatality in *Stockholm*, where from the year 1749 to 1764, inclusive, 43,393 children are reported to have sunk under it. Even WILLIS supposed its seat to be in the breast, but HARVEY makes it a disease of the stomach, and ASTRUC an inflammation of the larinx and pharinx, produced by an original affection of the former, from indigestion. He seems to have been one of the first that discarded the use of oily and pectoral medicines, (which, indeed, some practitioners have since been weak

enough to revive;) though he advifed bleeding too indifcriminately.*

This diforder furnifhes another proof of the obfervation made on the impropriety of fubmitting the complaints of children to improper hands—the care of old women, and frequent change of air, being all that this diforder is, by fome people, thought to require:† but perhaps the maxim was never worfe applied. There is, indeed, a milder fort of hooping-cough, as there is of every difeafe, which calls for very little medicinal affiftance; and it is always in fuch cafes, that matrons and old nurfes acquire their credit. But there is no complaint of children with which I am at all acquainted, in which medicine is at times more evidently ferviceable, than a bad hooping-cough.

This difeafe is certainly highly infectious, and one of thofe that never appears a fecond time. It may attack at any age, adults being liable to

* See his *Difeafes of Infants.*

† If this be true to any degree, fo that children, with very little affiftance from medicine, have feemed to get rid of obftinate hooping-coughs, by removing from one air to another; it is not improbable, that this may have arifen as much from getting out of infected beds and apartments, which might keep up the contagion, through the medium of refpiration, as from any fpecific influence of the air, refulting merely from a change.

its influence, as well as younger people; but it more commonly takes place between the age of four months and twelve years. It often begins as a common cough, and is attended with the usual symptoms of having taken cold, but in its progress soon becomes more severe; though the longer it may be before it plainly discovers itself, by the *hoop*, the more favourable it is likely to be. A flux of rheum frequently comes from the mouth, nose, and eyes, and the food is thrown up, together with a viscid phlegm, (often in great quantities) in the coughing fits; between which the child generally appears to be perfectly well, and eats its food very heartily. These are the more common symptoms, but when the disease is violent, and has continued for some time, they become greatly aggravated, especially in the night, and the child will seem almost strangled in each fit, the face and neck becoming perfectly livid, till by a violent effort, attended with a hoop, it recovers its breath; the blood will likewise sometimes rush from the nose and mouth; and I have in two or three instances seen the eyelids as black as if injured by a violent blow, and remain so as long as the cough has continued severe. When taken in time, however, and properly treated, the hooping-cough is rarely fatal, and scarcely ever but to young in-

fants, and never as long as the patient is free from fever, or other diſeaſe.

It has been thought by ſome practitioners, that little more than emetics, and gentle laxatives are required, in which view it was, that the late Dr. JAMES recommended his powder; though a late writer* has, very imprudently, wiſhed to diſcard the former altogether. But the fact is, that many other means are equally uſeful, and not unfrequently indiſpenſibly neceſſary, unleſs we ſhould ſuffer the patient to be ſtrangled in a fit of coughing, or fall into a decline, from the injury which the lungs muſt endure by a frequent repetition of ſuch violence.

This muſt be exceedingly apparent from the above hiſtory of the diſeaſe, the various ſymptoms of which, certainly demand, a conſiderable diverſity in the treatment. The more important ones are, the ſtate of inflammation, ſometimes inducing peripneumony: the quantity and viſcidity of the phlegm; and the ſpaſmodic affection, and danger of ſuffocation; together with the exhauſted ſtate into which the patient may be reduced by the long continuance of the diſeaſe. If the breathing therefore be difficult, a bliſter is indicated, which, if the child is not very young, may be kept open for

* Mr. J. G. Jones.

two or three weeks; or, what is ſometimes preferable, the repetition of a ſmall one, once in ſix or eight days. If the face ſhould be very livid, and ſwollen, during the fits of coughing; if any veſſel give way; or the patient be plethoric, and more than two or three years old, or ſhould be hot between the paroxyſms; a little blood ought to be taken away, and a ſaline draught be adminiſtered, every ſix or eight hours, and the bowels kept open, till the fever ſhall diſappear. Otherwiſe, if none of theſe ſymptoms attend, bleeding does not ſeem, in general, to be indicated, nor much purging, but may rather have a tendency to protract the diſeaſe, by increaſing the ſpaſmodic diſpoſition, and by weakening the patient. On the other hand, ſtomachic cordials, ſuch as the oil of cloves, and bitter tonics, are often exceedingly uſeful.

If there be an inclination to vomit, it ought to be encouraged, unleſs the phlegm be brought up with great eaſe in almoſt every fit of coughing, in which caſe, nature ſeems able to accompliſh the buſineſs herſelf, and it will then oftentimes be ſufficient to keep the body open by the mildeſt laxative medicines. But it very rarely happens, unleſs in infants at the breaſt, that ſome kind of emetic is not neceſſary in the firſt ſtage of the

complaint. The diſeaſe, indeed, frequently requires no other medicine; for ſuch uſually keep the body open at the ſame time, which it ought always to be. For this purpoſe, perhaps, wine of antimony may be as proper as any thing when it anſwers the end; but I have thought it leſs certain than tartariſed antimony, from its not being always of an equal ſtrength. I have, however, been lately in the habit of uſing it very frequently, and when the proper doſe has been aſcertained, have thought it operates more mildly than the tartariſed antimony, which ſometimes proves too far violent for very young infants. Whenſoever preferred, however, diſſolved in water with the addition of a little ſugar it forms a medicine to which children will never make any objection; and may be given upon an empty ſtomach, every day, or every other morning, according to the ſtrength of the child, and degree of diſeaſe. If the cough ſhould happen to be more violent at any particular time, the emetic ſhould be given a little before the paroxyſm is expected. Or perhaps a ſtill better method, at leaſt in ſome caſes, and particulalry in very young children, is, to give the tartariſed antimony in ſmaller doſes, together with a few grains of magneſia, or prepared oyſter-ſhell powder, (according to the ſtate of the bowels) three

or four times a day, so as to keep the ſtomach in ſuch an irritable ſtate, as ſhall ſecure a gentle puking every time the fits of coughing come on. But in whatever way this medicine be directed, it will prove of no ſervice if it does not excite vomiting, and muſt therefore be given in a doſe ſuitable to the ſtrength of the ſtomach, which is exceedingly various, not only at different ages, but in children of the ſame age, and of the ſame apparent habit of body. If one preparation of antimony may have any advantage over another, they have all much more over every other emetic I have made uſe of; the ipecacuanha, and oxymel of ſquills, being exceedingly unpleaſant, and the latter, as far as my experience goes, uſually more uncertain than any other emetic.

Such a plan is all that will be neceſſary in the common hooping-cough; but it has been ſaid, there are many caſes which will require other means, and demand all the ſkill of the experienced phyſician. The cough, for inſtance, will ſometimes increaſe not only for days, but for weeks together, and the ſtrangulation be exceedingly alarming. In this caſe, the lac ammoniaci, but eſpecially aſa fœtida, frequently proves a ſovereign remedy, and though exceedingly nauſeous, many children will take it tolerably well for the ſhort time it appears to be abſolutely

required; and when they will not, it may be administered by way of clyster, dissolved in a small quantity of penny-royal, or common water. These medicines, however, will be improper in the very advanced stage of the disease, when attended with hectic heat, hemorrhage, or other phthisical symptoms; a caution equally necessary in regard to the bark, which in the absence of these symptoms, and after the stomach and bowels have been well cleansed, is frequently very useful at the latter stage of the disease, when the patient has been exhausted by its long continuance. Upon the same plan with the asa fœtida, camphor and castor are frequently beneficial, and have the advantage of being less nauseous, but I think are proportionably less powerful. I take no notice of tincture of cantharides, though strongly recommended by some writers, because I have had no experience of it myself, and indeed have never found any necessity for trying it. For the like reason, I say nothing of arsenic, lately strongly recommended, by Mr. SIMMONS of *Manchester*.*

It will sometimes be of no small service, to rub the hands, and the soles of the feet, with the spirit ammoniæ comp. several times in the

* See DUNCAN's *Annals of Medicine*, for 1797.

day; or the ſpine of the back, and the pit of the ſtomach, with oil of nutmeg, or oil of amber; but as the ſmell of the latter is very unpleaſant, it may be diſpenſed with, where the ſpaſms are not exceedingly urgent. But when they are ſo, this oil is ſometimes very uſeful, particularly when adminiſtered internally, and children of three or four years old will take a few drops of it very well, mixed in a ſpoon with a little Liſbon ſugar; from which I have ſeen as evident advantages, as from any medicine whatever. But frequently, no anti-ſpaſmodic is equal to opium, in this, as well as in other diſeaſes. With this view, a few drops of laudanum, or if a pill be preferred, two or three grains of the pil. è ſtyrace, and to younger children a ſmall tea-ſpoonful of ſyrup of white poppies, taken at bed-time, will not only quiet the cough, and remove the ſtrangulation during its operation, and procure the patient ſome reſt, by which the ſtrength will be recruited, but in many caſes ſeems to have a kindly operation on the diſeaſe itſelf. It is in this way, I doubt not, that the cicuta has gained ſo much reputation, but I believe, it is no otherwiſe a remedy for it than as an anodyne. From a miſtake, however, in this reſpect, the ſtrong manner in which this medicine has been recommended by Dr. BUTTER,

has certainly done harm; as I have known people depend ſolely upon it in very bad caſes, to the excluſion of other remedies evidently indicated, which would at leaſt, have ſhortened the diſeaſe. Joined with emetics and other means, as the ſymptoms may indicate, it is, nevertheleſs, a valuable medicine. Inſtead of the ol. ſuccini, the following will often have a good effect, in children of four or five years of age; acting both as a tonic cordial, and ultimately as a ſedative.

℞. Olei Caryophil. aromat. Gtt. xxiv
Sacchari puriſſimi ʒiß
Muc. Gum. arab. ʒiij
Simul optimè terantur, addendo gradatim
Aq. Cinnam. ℥iß vel ℥ij
Aq. diſtil. ℥iv.
ft. miſtura, cujus ſummatur cochl. j largum tuſſe appropinquante, vel ſtatim poſt tuſſem.

If obſtructions in the lungs be ſuſpected, bliſters ſhould be applied, and recourſe had to gentle deobſtruent medicines; but at this period, the cure is chiefly to be accompliſhed by perſeverance in cooling laxative medicines, by a vegetable and milk diet, (eſpecially aſſes milk) pure air, and gentle exerciſe.

The cough after having diſappeared for a week or more, is ſometimes found to return with

great violence, eſpecially upon taking cold; but a gentle purge or two, a vomit, and abſtaining from heavy food, generally remove it in a very ſhort time. Should this fail, a grain of aſa fœtida, taken two, three, or four times a day, according to the age of the child, never fails to check it immediately. If the ſecautions ſhould be neglected, the cough will oftentimes prove extremely tedious. And in this caſe I have known the *lichen*, or aſh-coloured ground liver-wort prove an excellent remedy. One ounce may be boiled in two pints of water, to one; or a like decoction of the oak-lungs; a table ſpoonful may be given two or three times a day to infants of a year old. Theſe have had an immediate good effect where infants have appeared to be going faſt into an hectic ſtate, after the cicuta, ol. ſuccini and cortex peruv. have failed, or the diſorder has hung on unpleaſantly.

A mode of cure of a very different kind has lately been announced by Dr. STRUVE, of *Gorlitz*, and may be noticed in this place, as worthy, at leaſt, of a trial in obſtinate caſes, and in a conjunction with other means; though with a caution to young practitioners, in regard to infants and delicate children.

After preſcribing an emetic, the following mixture is directed to be rubbed in every two hours,

in ſmall quantities, about the region of the ſtomach.

℞. Antimon. tartariſati ℈j
Aquæ puræ ℥ij
ft. ſolutio; cui adde
Tinct. Cantharid. fort. ℥j.

In various inſtances, the Doctor obſerves, that a gentle perſpiration came on during the night, after the uſe of this application; that the violence of the cough immediately abated, and in a ſhort time the ſymptoms totally diſappeared.

The only thing that remains to be ſpoken of, is the proper diet, which is, indeed, of conſiderable importance; and for children even of five or ſix years of age, ought to be little more than milk and broths. Theſe are eaſily digeſted, and will afford them much more good nouriſhment than any kind of meats, and will ſit much lighter on the ſtomach than puddings, or paſtry, the latter of which is exceedingly injurious. The objection made by old nurſes againſt milk, that it breeds phlegm, is utterly founded in a groſs miſtake that cannot be too frequently controverted. It has, indeed, been ſometimes mentioned by a certain claſs of medical people, but the objection is ſo truly unphiloſophical, and unlike the objections of thinking men, that it carcely deſerves a reply. Should the milk,

however, be found to curdle remarkably ſoon on the ſtomach, a little common ſalt, Caſtile ſoap, or teſtaceous powder, may be added to it occaſionally; or aſſes milk may be ſubſtituted for cow's. Theſe light nouriſhments ſoon paſs out of the ſtomach, or if brought up by coughing, fifty times in the day, (as I have known them to be) a child of four, or five years old, will immediately take more of them with avidity, and will be better ſupplied in this way, I mean by taking a tea-cupful at a time, than by making ſet meals, or taking a large quantity at once. If the child ſhould be thirſty, a little apple-water, toaſt and water, tamarind-tea, and other thin drinks, will be pleaſant and uſeful. Patients treated in this way, will get through the complaint if not ſevere, in a very ſhort time; and where it proves violent, a child will ſtruggle through this long diſeaſe, without any conſiderable loſs of ſtrength, or will be very ſoon recruited by a decoction, or cold infuſion of the bark, together with gentle exerciſe, and country air, the beſt reſtoratives after every kind of diſeaſe.

Tussis Spasmodica.

Much akin to the former complaint, is a troubleſome cough, properly enough denomi-

nated ſpaſmodic, or convulſive. In a certain ſtate of the air it is ſometimes epidemic, and young children, and even infants in the month, are then attacked by it, as well as adults. The irritation ſeems to be about the larinx, or a very little lower down, and is exceedingly diſtreſſing, at the time of coughing; but the patient, though an infant, ſeems immediately afterwards to be quiet and comfortable. This cough is not uſually attended with fever, nor other ordinary ſymptoms of a common cold, nor is it to be relieved by the like means; the cough remaining dry and hoarſe under the uſe of pectoral remedies.

Children of two or three years old may be cured by the cicuta, and gentle laxative remedies; but the former being leſs adapted to infants in the month, ſuch may take a few drops of the ſyrup of white poppies, three or four times a day, and their bowels be carefully kept open; which means ſeldom fail of removing the complaint in three or four days—Should the ſyrup over-much conſtipate the bowels, or otherwiſe diſagree, Bates's Sp. Sal. ammon. ſuccinat. may be tried in its ſtead; which is a good medicine in other dry convulſive coughs, where there is no fever.

I have met with this complaint very frequent-

ly in children from two to four years of age, in ſome of whom it had been of ſeveral weeks ſtanding, and after various remedies for coughs had been made trial of. In every inſtance, the complaint has been immediately relieved by the cicuta, and in a week or ten days, been uſually removed.—The like good effect has attended an infuſion of the oak-lungs, after many of the ordinary remedies for coughs have failed; and may very well be adminiſtered together with the cicuta, if that ſhould not be ſoon attended with good effect.

There are, however, ſome more formidable caſes, in which the ſymptoms are generally aggravated, and children continue longer in a convaleſcent ſtate. I have alſo been called to viſit ſome under all the ſemblance of approaching death, with profuſe ſweats, rapid and feeble pulſe, and laborious reſpiration; ſuppoſed by able phyſicians to be ſinking faſt under peripneumonia notha, or the more aggravated ſymptoms of a true pleuritis.

Although reduced to this ſtate, under the beſt conducted antiphlogiſtic plan, yet has a recourſe to the cicuta ſucceeded equally well, giving immediate relief to all the ſymptoms. But a degree of dyſpnœa all along merely ſpaſmodic, having, in ſome caſes, ſtill continued, it has been

found expedient, after a week or ten days, to have recourſe to the bark. At the ſame time, the violence of the cough attended with very copious ſecretion of phlegm, which young children ſeldom ſpit up, has required two or three gentle emetics, which have then not failed having a happy effect; though adminiſtered previouſly to the cicuta, I have known them greatly aggravate the ſymptoms, probably, by increaſing the debility, and diſpoſition to ſpaſm.

As many practitioners, not very converſant with this complaint, under its more aggravated appearances, have been led to conſider it as inflammatory, ſo others, from the continuance and violence of the cough, have expected it to terminate in the hooping-cough, but have been equally miſtaken; this being a diſtinct ſpecies of ſpaſm, and never attended with the true hoop.

Mr. Moss ſpeaks of a ſpaſmodic cough, different, he thinks, from any previouſly deſcribed,* and probably an endemic of *Liverpool*; reſembling, however, the humoral aſthma of adults (he ſays) more than any other.

It is ſaid to commence a few days after birth, and to continue for ſeveral weeks, or ſometimes for months; and in either caſe ſo commonly proves fatal, eſpecially amongſt the lower claſs of

* An. 1781.

people, that Mr. Moss is at a loſs to ſuggeſt any appropriate remedy.

If it be truly an endemic, I can, probably, judge but very imperfectly of it; but from many circumſtances in the ſpaſmodic cough deſcribed in this chapter, it does not ſeem unlikely, that the cough at *Liverpool* may be of the ſame kind. What the former might become if very long neglected, or improperly treated; or in what time it might prove fatal, I am not prepared to ſay, having always ſoon ſucceeded in its cure by the means I have recommended; which may, poſſibly, be worthy of a trial at *Liverpool*, as they will not ſet aſide the little general remedies in uſe.

SUFFOCATIO STRIDULA.

THE Croup, or acute aſthma, is a complaint ſomewhat ſimilar to the two former; to which, perhaps, children only are liable, called, therefore, aſthma infantum ſpaſmodicum, alſo ſuffocatio ſtridula, cynanche trachealis, and eſquinancie membraneuſe.

Though this complaint has for ſeveral years infeſted this country, it has been greatly miſunderſtood, both by writers and practitioners; there being certainly two ſpecies of it, the one

acute, or inflammatory, the other chronical, or ſpaſmodic. Theſe ſeem to have been confounded by ſome authors, and one of them, perhaps, not known to others. Neither of them are often found to attack thoſe who have arrived to the age of ten or twelve years, and, according to Dr. Millar, the ſpaſmodic chiefly ſeizes infants newly weaned; and is then the moſt ſevere. He is, perhaps, the firſt perſon in this country who has written particularly on this ſpecies; but Dr. Home has treated more diſtinctly on this complex diſeaſe, which had, however, been mentioned by ſome *German* writers, and well deſcribed by them long before it was noticed in *Britain*.

Remote cauſes of this diſorder may, poſſibly, be the lax fibres of children, the abundance of moiſt humours natural to them, and the vaſt ſecretion from the bronchial veſſels; and perhaps the change of food from milk, which is eaſily aſſimulated, to one requiring more digeſtion.

The prophylaxis is the ſame as in moſt other diſeaſes peculiar to children. If this complaint ariſe from the laxity of their ſolids, the quality of their food, and the natural weakneſs of their organs of digeſtion, the general means of prevention, as well as of cure, will be readily indicated. Their food ſhould be ſuch as may

be eaſily digeſted, and may prove nouriſhing. A due proportion of milk and broth,* (taken either ſeparately, or mixed) whilſt children are very young, or light meats when they become older; good air and exerciſe, and a careful attention to the ſtate of their bowels.

The proximate CAUSE of this complaint, (at leaſt of the acute croup) is a morbid ſecretion of a viſcid mucus in the trachea, adhering ſo firmly to its ſides as to impede reſpiration. The quantity and viſcidity increaſing, gradually leſſens the diameter of the part, and if it effect this to a conſiderable degree, the diſeaſe muſt neceſſarily prove fatal.

The SYMPTOMS of this complaint are ſpaſmodic, being ſuch as would be produced by any other matter conſtantly irritating the trachea, and diminiſhing its diameter. They will therefore very much reſemble thoſe of the nervous aſthma, but the complaint differs materially from the common ſpaſmodic aſthma of adults, in the peculiar, croaking, noiſe made in reſpiration, (from whence it has its name) and in the violence of the paroxyſms; which, however,

* A diet of milk only, even in adults, when long perſiſted in, though otherwiſe proper, will create flatulencies. BARRY, *On Digeſtion*.

when the diſorder is light, leave no apparent in-diſpoſition, ſave a certain dulneſs, and a ſenſe of fear, in children capable of expreſſing it. The fits frequently terminate by ſneezing, coughing, or vomiting, and return without any regularity. It is attended with a ſharp, and ſhrill voice, and a fluſhed countenance, which grows livid during the paroxyſms.

Dr. MILLAR, who has written largely on this diſeaſe, (I apprehend, as it appears in *Scotland*) divides it into two principal ſtages; in the latter of which no method of treatment has appeared to him to be effectual, but medicine is never more efficacious, he thinks, than in the firſt, if the diſorder be not combined with ſome other, and it be taken in time; though the crouping may be very conſiderable. This I ſaw remarkably exemplified in the firſt inſtance I met with, which was in a little boy of my own, who was nearly cured in two days. The ſovereign remedy he directs is aſa fœtida, which ſhould be adminiſtered both by the mouth and in clyſters, in doſes according to the exigency of the complaint; and where no marked inflammation has taken place, may be given very freely; and afterwards the bark, when the ſpaſms remit.

This account of the diſeaſe can certainly apply only to the ſpaſmodic, and is not the diſ-

order usually known in this city by the term croup, but a mere spasmodic complaint, totally unaccompanied with inflammation; at least is so, whenever asa fœtida is thus useful in the first instance. And this seems to be further evident, from the recovery of such patients, and the consequent want of proof of the existence of that tough membrane found in those whose bodies have been examined after death; in whom the disease is always of short continuance after the croup, or croaking noise in respiration, has taken place. Whereas, the other kind of croup has sometimes been known to continue for two months, and then has yielded to opium. Instances have likewise been met with of children crouping for two or three days, and being then seized with hooping-cough, which has instantly removed the croup: these circumstances seem to prove that species of croup to be truly spasmodic. I have seen it repeatedly in this form attend the cutting of teeth; being then the mere consequence of irritation, as we see cough and various other symptomatic affections induced at this period. How far Dr. MILLAR may have mistaken what he calls the two stages of the croup, for two very different species of this complaint, has been hinted already. From my own experience, however, which has been con-

ſiderable, as well as his authority, it ſeems very proper that a trial ſhould be given to the aſa fœtida, when there is no degree of fever, and the child ſeems little, or nowiſe indiſpoſed, in the intervals of the crouping. Emetics likewiſe will ſometimes be found neceſſary,* as will the cicuta and bark; one or other of which muſt be perſevered in, as long as any ſymptoms of the diſeaſe, and particularly the croaking noiſe, ſhall remain. And from the ſucceſs attending this practice, and a proper diſcrimination of the diſeaſe, there may be more room for hope in this cruel diſorder, than ſome practitioners have been induced to think.

But the other ſpecies of croup is a moſt dan-

* In one inſtance, medicines of this claſs were given in ſuch uncommonly large doſes, (as it was obſerved in a former edition) that it may not be amiſs to notice them here.

From beginning with one grain of pulv. antimon. which was ſeveral times repeated, the child (under three years of age) took afterwards a drachm, and two drachms of vin. antimonii; then pulv. ipecacuanhæ ℈ß. grs. xv, and ℈j, to which was added gr. j antimon. tartariſati; and at length, gr. x, and afterwards ℈j of vitr. album. The trial of emetics was then then given up for ſeveral days; at the expiration of which he took oxym. ſcillæ ʒiij. with ʒj. vini antim. which ſucceeded better than any thing, though it puked him only very moderately; but continued to do ſo for three or four times that he took it.—For remarks on the inertneſs of emetics and purges, ſee page 24. *Note.*

gereous diſorder, being, it has been ſaid, truly inflammatory in the firſt inſtance, and is, I believe, always attended with a quick pulſe, cough, and laborious breathing very ſoon after the croaking noiſe has taken place, with a ſenſible fulneſs about the fore part of the throat; although at the time of the attack children often appear in perfect health.

It does not, however, always ſeem to be an original diſeaſe; being ſometimes a conſequence of bad fevers, eſpecially the febris ſcarlatina, as well as of ſome chronical diſorders that have reduced the patient's ſtrength, and is then much more dangerous. But the worſt kind frequently appears to ariſe from the ſame cauſes as the malignant ſore throat, only having its ſeat lower down, and is therefore more ſevere. And it has in ſeveral inſtances, accompanied it, as may be known in the early ſtages of that complaint, by the croaking noiſe peculiar to the croup; and, I believe, is in ſuch inſtances generally fatal. It has likewiſe accompanied the laſt ſtage of the putrid thruſh, and has then carried off the little ſufferer in a few hours.

On this ſpecies little more need to be ſaid; the diſeaſe being always ſhort, and the treatment very evident. Bleeding is always neceſſary, if the phyſician be called at the commencement

of the diſeaſe, or ſtridulous noiſe; and if the patient be viſited too late to endure this evacuation, I believe no hope can remain of his being benefited without it, unleſs the infant be very young; which, however, in another view, cannot but add to the danger. If the patient be three or four years old, and plethoric, a copious bleeding by the lancet may be the preferable mode; but if much younger, or of a delicate habit, four, ſix, or even more leeches ſhould be immediately applied to the throat, eſpecially if there be any perceptible fulneſs of that part, and a bliſter applied to the nape of the neck. The patient may likewiſe breathe the vapours of warm water with vinegar in it. After the leeches and bliſters have been applied, a vomit ſhould be adminiſtered, and the ſickneſs kept up for ſeveral hours, by ſmall doſes of the antimonial powder; which will generally ſucceed if had recourſe to within ſix or eight hours of the commencement of the diſeaſe. At the cloſe of the complaint, and to prevent a relapſe, the bark proves highly ſerviceable, and will alſo reſtore the ſtrength of the patient.

The *French* writers likewiſe depend much upon emetics, and afterwards lenient purges; and to prevent a return, adviſe aperitives, ſtomachics

and tonics, particularly preparations of ſteel, and natural chalybeate-waters.

In the kingdom of *Ireland*, particularly about *Mullinger*, in the county of *Weſtmeath*, where there are many lakes, the croup is a very common complaint; and equally inflammatory and dangerous as amongſt us. It is likewiſe apt to return, (though ſeldom ſo violently as in the firſt inſtance) if the patient ventures abroad too ſoon and is expoſed to the bad air of that quarter. The method of treatment there is ſomewhat different from ours, blood being immediately drawn from the foot, inſtead of the throat or arm, and often in a large quantity, the child being placed at the time in a warm-bath; a bliſter is then applied between the ſhoulders, and the bowels are kept open, chiefly by clyſters. Emetics are not had recourſe to, nor indeed any means but the above; the violence of the complaint abating very ſoon, or the child thought to be paſt recovery. The complaint is, poſſibly, not perfectly underſtood in this quarter, and in the northern parts of that kingdom neither this ſpecies, nor the chronical croup is at all known, according to my information.

In *North-America*, a very different mode of treatment has been adopted; calomel being recommended as a moſt ſucceſsful remedy, after

bleeding and the application of bliſters, (when peripneumonic ſymptoms attend, and the ordinary remedies of emetics and purges. And Dr. RUSH, of *Philadelphia* is ſo ſanguine in regard to it as to aſſert, that the bark is ſcarcely a more certain remedy for intermittents, than calomel, when thus adminiſtered, is in this ſpecies of Cynanche.

Should this prove to be the caſe, after repeated fair trials in this country, the public will, indeed, be much indebted to him, and I ſhall be happy in thus further introducing ſuch a remedy to notice; though I have not myſelf had an opportunity of putting it to a fair trial, ſince Dr. RUSH's book came to hand; though I have adminiſtered it repeatedly, in ſlighter affections.

In Dr. FERRIAR's *Medical Hiſtories and Reflections*, vol. iij, there are likewiſe ſome very good obſervations on this diſeaſe; which he alſo has very properly divided into the *acute* and *ſpurious*. In the former he remarks certain precurrent ſymptoms whereby this dangerous diſeaſe may be foreſeen; but I am ſatisfied, this is not always the caſe: though much deference is due to his great attention to this ſad diſorder, and the very conſiderable experience he has had. The treatment recommended is very agreeable to that I have laid down; but with the addition

of one remark, very worthy of attention, viz. that the venæſection ſhould be very copious, and nearly *ad deliquium*.

Whilſt this work was in the preſs, I have learned, that Dr. JOHN ARCHER, of *Harford* county, *Maryland*, in *America*, has ſtrongly recommended the ſeneka-root, (*Polygala Serega, Linn.*) as an almoſt infallible remedy in this diſeaſe. I ſhall therefore preſent the reader with the Doctor's account in his own words, in a letter he wrote to Dr. BARTON, of *Penſylvania* College.

"I have in a great many inſtances found a decoction of the *Seneka* the moſt powerful medicine in the cure of this diſeaſe, and I am happy to tell you that I believe it may be depended on. I make a ſtrong decoction of the root in the following manner, viz. half an ounce of the ſeneka, in coarſe powder is boiled in eight ounces of water, down to four. Of this I give a tea-ſpoonful every half hour, or hour, as the urgency of the ſymptoms may require; and at intervals a few drops, to keep up the ſtimulus, until it either acts as an emetic or cathartic. I then repeat it, in ſmaller quantities, ſo as to preſerve the ſtimulus of the ſeneka conſtantly in the mouth and throat.

"If the diſeaſe be more advanced, and the

breathing more difficult, with a peculiar harſh or ſhrill ſound, like air forcibly drawn through a ſmall aperture; attended with a retraction of the upper part of the abdomen under the cartilages of the ribs; I then give calomel freely and frequently, and rub mercurial ointment on the throat and contiguous parts, ſo as to affect the glands of the throat and mouth, as quickly as poſſible. This I do that the mercury may co-operate with the action or ſtimulus of the ſeneka, and thereby haſten the ſeparation of the membraneous ſubſtance formed in the trachea.

"In this method I have ſucceeded in the cure of the croup, even beyond my moſt ſanguine expectations."

Having had no opportunity of making trial of the ſeneka in this diſeaſe (though I have lately found it very uſeful in the latter ſtage of *pleuriſy*) I have only to remark upon it, that the intention ſeems to be very ſimilar to the repeated doſes of emetic tartar that have been recommended in this chapter; while the exhibition of calomel, and mercurial ointment accord with the application of bliſters. Which of theſe means may be the more ſucceſsful, or how far the application of leeches, at the commencement of the diſeaſe, may be ſafely diſpenſed with, actual experiment only can determine.

I have examined the trachea after death in only three patients, in two of which I found the precise appearances described by Dr. MILLAR and others; the wind-pipe being lined with a tough viscid coat, so as mechanically to close up the passage. The third instance was in an infant who died suddenly of the hydrocephalus, a few days after appearing to be recovered from the croup.

RACHITIS, *or* RICKETS.

THIS is a late disorder in *Europe*: ASTRUC observes that *England* is said to be the part in which it first made its appearance, and that it was then described by GLISSON and MAYOW; but he thinks it probable, that it appeared at the same season over all *Europe*, through the coldness of the weather. It was named Rachitis, from the *Greek*, implying that the spina dorsi is particularly affected by it;* though it rarely attacks the spine till the disorder is far advanced.

* From this circumstance, it has been supposed to have been known in the time of *Hippocrates*; but his remark (*Aphor.* § 3. 26.) is certainly too concise to establish the point; as it is simply observed, that among other complaints, infants after the period of dentition, are liable to καριθμια, ϖονδύλȣ του κατα τὸ ἰνίον εισω ὤσιες.—In *Monf. Le Febure de Villebrune's Greek* edition of the *Aphorisms*, there are, however, some

It was firſt noticed in the weſtern parts of *England,** about the year 1628, † and is ſaid to have taken place upon the increaſe of manufactures, when people left the villages and huſbandry to ſettle in large manufacturing towns; where they wanted that exerciſe, and pure air, which they had enjoyed in their former ſituation and employments.

It may, therefore, frequently ariſe from unhealthy parents, eſpecially from mothers who paſs too ſedentary a life in a bad air, and feed upon a weak and watery diet; from children's food being weak, watery, or too viſcid to be properly digeſted; but above all, perhaps, from bad nurſing, and children being left wet, dirty, or expoſed to a cold moiſt air, ‡ without ſufficient covering; from want of proper exerciſe, and

obſervations tending to evince, that this diſeaſe is of an older date, by ſome centuries, than it has been generally imagined; and this, it ſhould ſeem from the nature of the diſeaſe, is not unlikely.

* See GLISSON. † PRIMEROSE.

‡ From the experiments lately made by Drs. *Beddoes*, *Withering*, and others, upon atmoſpheric air, and its relation to diſeaſes, it cannot be at all ſurprizing, that this diſorder, particularly, ſhould often be owing to foul air, in which, what has been lately termed the azote, is too predominant. And it is worthy of remark, that this complaint is ſcarcely known in very hot climates.

from close and crowded apartments. On this account, children of poor people are particularly liable to this disorder: parents, and governors of work-houses ought therefore carefully to guard against the last mentioned causes.—Or lastly, from the habit of body being reduced by the long continuance of almost any of the complaints hitherto considered. From these sources arise what may be termed its proximate causes; such are, a load of undigested juices in the stomach, intestines, and all the first-passages: an universal viscidity in the extreme vessels, especially of the joints; a corrosive acrimony from a too languid circulation, and a general obstruction in the fibres of the muscles.

The usual SYMPTOMS of rickets are soft flesh; bloated, or a very florid countenance; weakness; dislike to motion; with enlargement of the belly, head, and joints. The wrists and ankles enlarge first, afterwards the back, and breast-bones; and, indeed, all the bones swell and become soft, especially the more spongy ones. The pulse is quick, and feeble, and the appetite and digestion usually bad. Teething is commonly late, though not frequently difficult, but the teeth often rot early, and fall out. Great acuteness of mind has been observed in this, and some other chronical complaint. It seldom attacks

children before they are ſix months old, or above two years.

As it appears to ariſe from a general weakneſs and relaxation,* the indications of CURE are to brace and ſtrengthen the ſolids, and to promote digeſtion, and the formation of good chyle. Theſe ends will be promoted by wholeſome, and dry food, ſuited to the age; good bread, or biſcuit; and roaſted meats, rather than boiled; with a little red Port wine. Should the child be too young to eat fleſh meats, its diet ought to be chiefly of broths, milk, rice, millet, pearl-barley, ſalep, and ſemolina, with ſpices, if it be not inclined to be feveriſh.—This, however, is ſometimes the caſe in older children, though, perhaps, too rarely ſuſpected, and requires in that ſtate of the diſeaſe a very oppoſite treatment; even ſmall bleedings being then found ſerviceable.—The child muſt above all have good nurſing, and eſpecially exerciſe and air, without being kept very hot or very cold: unleſs a ſtrict attention be paid to theſe, medicine

* *Monſieur Bonhomme* of *Paris*, has formed a different and ſtrange theory of the nature of this diſeaſe; and recommends very ſtrongly the internal exhibition of phoſphate of lime and phoſphate of ſoda, together with an external waſhing with an alcaline liquid made by diſſolving half an ounce of common pot-aſh, or ſal tartari, in a pound of very pure ſpring water.

can be of but little ſervice. If the child be too young to exerciſe itſelf by walking and ſuch like, the nurſe, beſides affording it every exerciſe it can bear, may induce the infant to exert itſelf to no ſmall advantage, by the following eaſy means. She has only to daſh a few drops of water ſuddenly in its face ſeveral times a day, in the manner often done to recover people from a ſwoon, though leſs violently. This will oblige the infant to put almoſt every muſcle into action, by which the blood will be forced through the minute veſſels, and many of the advantages of exerciſe produced, and in a more powerful manner. To the ſame end, linen cloths wetted with cold water, with the addition of a little ſpirit of any kind, may be applied to the arms and legs, or to the ſpine every time the child is dreſſed or undreſſed, eſpecially if the bones of theſe parts are become enlarged or diſtorted by the diſeaſe. The parts ſhould afterwards be rubbed very dry with a piece of warm flannel.

If the child be of a groſs habit, the eighth part, or a quarter of a grain, of ipecacuanha, taken once or twice a day; gentle pukes, and very briſk purges, eſpecially of the pulv. è ſcammonio cum calomel. prove of uſe. The tinct. aloës comp. is alſo a good medicine, a few drops once or more in a day, (as may ſuit the ſtate of

the bowels) taken on a bit of fugar, or otherwife. In fuch habits, all foundation of a cure muft be laid in reducing the belly to its proper fize, and in ftrengthening the ftomach. If rather delicate, the cold-bath is often of more fervice than any thing elfe: but this fhould not be entered upon in winter, nor without previous purging. Frictions afterwards with flannel and aromatic powders, or the fumes of frankincenfe, maftic or amber, efpecially on the back and belly, will further tend to ftrengthen the habit. Befides fuch means, the cold infufion of bark, and other bitters, efpecially columba; or fmall dofes flor. martial. tincturæ myrrhæ, or the vinum ferri, have often the beft effect. Dr. TEMPLE prefers the following form above any other.

R. Rubig. ferri gr. iv
Pulv. Rhei gr. iij
Sacch. albi gr. x.

mifce. ft. pulvis, mane et vefperi fumendus quotidiè.

The rhubarb fhould be increafed or diminifhed, as may be neceffary, two ftools a day, it is faid, being fully fufficient.—The following is likewife from him.

R. Zinci calcinat. gr. ij
Teft. oftreor. ppt.
Sacch. alb. āā ℈j

Pulv. aromat. gr. xij

misce et divid. in chart. vi. quarum capiat unam nocte et mane quotidiè. The rubigo ferri and the zinc are to be gradually increased.

It has been before remarked, that under every plan, a good diet, air, and exercise, especially riding on horse-back, are of the utmost consequence; which if duly persevered in, and the state of the stomach and bowels properly attended to, will often effect wonders. A cure therefore should not be despaired of under any circumstances, provided the internal and vital parts are not diseased. Besides, this is one of those chronical complaints which seem to be gotten the better of by time, and like the following one, wears itself out, as it were; and to which the above mentioned means will greatly contribute— Sæpe Pertinacia Juvantis, Malum Corporis vincit. (*Celsus.*)

SCROFULA.

THIS is primarily a glandular disease, though in its progress it attacks the adipose membrane, the eyes, the muscles, tendons, and even the bones themselves, especially the joints.* Such

* From this propensity to spread, the disorder is said to have taken its name. "Strumæ, vel scrofulæ, sic dicuntur, quia frequenter in scrofis, id est, suibus, in collo fiunt; vel

at leaſt has been the general opinion, though from later inveſtigations there is reaſon to imagine that it originates in the cellular membrane. It ſeldom makes its appearance before two years of age, nor later than ten or twelve, (unleſs it be in regard to affections of the eyes,) though there are more exceptions in reſpect to the latter period; and it then often proves fatal, by falling on the larger joints, the lungs, or other noble part. It is frequently obſerved to follow other diſorders, particularly the ſmall-pox, whether taken naturally or from inoculation; alſo the hooping-cough, meaſles, teething, rickets, and many other diſorders already mentioned. Hence, the nature of this diſeaſe is better underſtood, as it ſo often falls upon weak and tender habits, either originally of a lax fibre, or worn out by previous diſeaſes; or is gradually brought on by a heavy, indigeſtible, and bad diet, or a low, wet, and unhealthy ſituation. It is, however, ſometimes found to be hereditary, but will very frequently lie dormant for two or three generations, (reſiſted ſometimes by inter-

à multiplici partu, quoniam ſicut ſues multos edunt partus, ſic in ſcrofulis ex una poſtundùmſiunt plures." (*Tractatus de Morbis Puerorum. Amſtolodami*, 1760.) The *Struma* is, nevertheleſs, a complaint as different from *Scrofula*, as it is from the *Broncocele*, and is chiefly *endemial.*

marriage in a healthy family) and afterwards appear with redoubled violence; as well as affect the greater part of a family very much, whilst the rest shall be entirely free from it. It is often attended, or rather preceded, by a peculiar look about the eyes, which are generally large, and a thickness of the upper lip; and sometimes proves a source of ill-health through life, but is not usually fatal in the first instance. Long before the external glands become affected, especially in young subjects, the belly is sometimes observed to be hard and enlarged; and after death, the mesenteric glands, the lungs, and even the pancreas have been found diseased.

Though this is always a very unpleasant complaint, and frequently does not admit of so much relief by medicines as many other disorders, yet it oftentimes disappears at the time of puberty, (and sometimes sooner) especially in females; but whether this be owing to the increased strength of the solids, or to other changes in the habit, naturally happening at that period, is not an inquiry proper for this place. On the other hand, after disappearing for several years, during which perfect health has been enjoyed, the humour has, unexpectedly, fallen upon some internal glandular part, frequently the mesentery, occasioning various pains and

complaints, often attributed to other cauſes, and has undermined the conſtitution; producing ultimately pulmonary conſumption, or a fatal maraſmus.

Although I thought it very neceſſary to mention this diſeaſe amongſt others to which the ſtate of childhood is liable, I am ſenſible how difficult it would be to point out any thing like a general, adequate remedy. At its firſt appearance, however, bitter, or mercurial purges, are ſometimes of uſe, as are alſo antimonial vomits; and frequently burnt-ſponge, and ſaponaceous medicines, warmed with ſpices, and continued for a length of time; though it ſhould be obſerved, that this diſorder ſometimes falls on habits of a ſomewhat plethoric temperament, and may for a while, demand the interpoſition of certain antiphlogiſtic remedies. But when the diſeaſe is confirmed, lime-water, and decoctions of the woods, together with crude antimony, bark, and ſteel, with wine, and a generous diet, are, I believe, moſt to be depended upon as internal remedies; from ſome of which, I have ſeen no inconſiderable cures effected. But in this, as in other chronical complaints, good air and exerciſe are of the greateſt importance. Indeed, the advantage of exerciſe in this diſeaſe is ſo great, that I wiſh to lay a very great ſtreſs

on it. But then it muſt be daily had recourſe to, and, by degrees, be ſo conſiderbale, as to render the patient every night ſenſibly fatigued. Thus, I have known riding behind a carriage, almoſt without the aid of any medicine, entirely remove the complaint.

When there are external tumours, I am ſatisfied that the opinion I have already given to the public, in a larger tract on this complaint,* is both rational and ſafe; and that whenever they are at all diſpoſed to come forward, and not ſeated on improper parts, they ought to be brought to as ſpeedy a ſuppuration as is poſſible. To this end, an epithem of honey, flour and yelk of egg ſhould be applied twice a day, and the parts be electrified. The ſcrofulous virus when thrown on the ſurface, ſo far reſembles the cancerous, according to the deſcription of the late ingenious Mr. HUNTER, that it is inclined to ſpread to a conſiderable extent; but as tumours of the former claſs will bear rougher treatment than the latter, I am confident that much benefit may ariſe from the uſe of external ſtimulants, by ſtopping the progreſs of the diſorder in the neighbouring parts, as well as by invigorating them, and thereby diſpoſing the

* See the author's *Surgical Tracts*.

ulcers to heal. Of this kind, are fumigations of hydrargyrus ſulphuratus ruber, and hydrarg. cum ſulphure. Alſo light frictions with mercury, ſo as to make it paſs freely through the lymphatics of the diſtempered parts, without affecting the ſyſtem, have in a courſe of time been beneficial, and deſerve to be brought into more general practice than they have hitherto been.

Under ſuch a plan, it will be very neceſſary that the body be kept open; and to this end, one drachm, or more, of the ſal cathartic. may be diſſolved in a pint of water, and taken every day as common drink. This quantity of ſalt will give very little taſte to the water, and, in ſome inſtances, has alone had a good effect in this dreadful complaint, eſpecially in ſtronger children and ſuch as are otherwiſe healthy. On the other hand, children of a delicate and ſpare habit are more likely to be benefited by the tonic remedies before mentioned, and ſuch as warm and invigorate the ſyſtem; of which claſs one lately recommended in *France* has been found exceedingly uſeful, and of which I ſhall here ſubjoin the form in which I have generally made uſe of it.

℞. Ammoniæ ppt. ʒij.

Rad. Gentian. incis. ℈j.

Affunde Spir. Vini Gallici ℥xij.
Fiat Tinctura.

Sumat æger cochl. infantum ad cochleare largum ex aquæ puræ q. ſ. ter, quaterve in die.

I have had further reaſon to be confirmed in the above opinion reſpecting ſtimuli, from obſervations communicated to me by Mr. PARTINGTON, who ſince the hints I threw out in the afore-mentioned work, has made uſe of electricity with very good effects, in theſe, as well as other cold tumours and ulcers I had mentioned; which have all healed very kindly, in conſequence of this ſtimulus to the parts. When ſcrofulous ulcers have been healed, and only ſome ſmall tumours remain, I have experienced very good effects from the external uſe of as ſtrong a ſolution of camphor in oil of almonds as can be made, which has diſperſed them very ſoon; and it has been found a very ſucceſsful remedy, in the cure of the incipient bronchocele, though enlarged to the ſize of a turkey's egg; and requires only to be very well rubbed into the parts, three times a day. The patient ſhould at the ſame time take a drachm or two of the tartariſed natron every morning.

The following is ſtrongly recommended by Dr. TEMPLE.

℞. Terræ ponderos. salit. gr. x
Aq. menthæ sativæ ℥ i ß
misce ft. haustus, ter quotidiè sumendus; et sensim augeatur quantitas terræ ponderosæ ad guttus xx.

Tobacco has also been lately very strongly recommended, in a treatise written by Dr. C. W. HUPELAND of *Jena*, author of a *Treatise on the Art of prolonging Life.*

An obvious discrimination should be made in regard to tumours about the neck; since many of them are of a harmless nature, or even salutary, the consequence of a slight feverish disposition, or of some little cold from a sudden stroke of air on the neck. These, it is well known, rise suddenly, become painful, and increasing daily in size, either very soon put on the usual appearance of suppuration, or begin to subside; and whether they break or not, are no indication of any thing materially wrong in the habit. On the contrary, scrofulous tumours always rise slowly, unless in very young infants, and after the small-pox; often continue a long time at a stand, and sometimes are not only months, but even some years before they suppurate; and then with very little pain, or true inflammation: For such, particularly when very large as well as indolent, embracing a large part of the neck; the white lily root,

with an equal quantity of bread, made into a poultice with milk, has been followed, at leaſt, with a ſurprizingly good effect, the tumour ſubſiding entirely in the courſe of a few weeks.

I ſhall only add further on the head of ſcrofula, what is very well known, that ſea-bathing alone, ſometimes effects a perfect cure. Should the child therefore have ſeveral ſcrofulous tumours, or the habit be conceived to be much affected, trial ſhould be made of the ſea, in whatever manner it may be determined the tumours ſhall be treated, if not diſperſed by ſea-bathing, as they frequently are.

ISCHURIA VESICALIS E MUCO.

BY this term is here intended an affection of the proſtate glands, or the coats of the bladder; though the ſame ſymptoms may alſo ariſe from the ureters or kidneys, whether owing to a ſtone or other ſtimulus.

It ſometimes appears during dentition, and other inflammatory affections, and will then call for cooling remedies: it generally diſappears when the teeth have made their way through the gums, and the fever ſubſides. Even in more advanced childhood, there is nothing like fever or other preciſe marks of diſeaſe, though,

it may be ſaid, this diſorder more commonly attacks children of a tender and delicate habit.

It is attended with frequent inclination to void the urine, and with more or leſs pain in its excretion, or more commonly, I think, before it begins to come away. The urine is very foul, is loaded with a very ropy mucus, and ſometimes comes away diſcoloured with blood, and at others, ſmall coagula fall to the bottom. This diſorder, indeed, puts on every appearance of the like diſeaſe common in adults, eſpecially old men, but is uſually much ſlighter, and therefore more eaſily and ſpeedily cured; for children being more irritable, the urinary paſſages are over ſtimulated by cauſes that would not affect adult perſons.

The appearance is, neverthele ſs alarming, as it may, poſſibly, ariſe from a morbid affection of the proſtate gland, or the bladder, and muſt then be a ſerious complaint; or it may be owing, it has been obſerved, to a ſtone in any of the urinary paſſages, in which caſe a cure cannot be effected as long as the ſtone remains. Fortunately, however, this is not a frequent cauſe in early childhood, and is not the caſe here intended.

The diſorder ſometimes yields in two or three weeks to mere diluent, and demulcent

medicines, ſuch as the lac amygdal. with ſyrup. alth. barley-water and gum arabic, ſpermaceti, and ſuch like; and it is probable, in ſuch inſtances, might in a ſhort time diſappear of itſelf.

In other inſtances more powerful means are required, which, either by creating a different ſtimulus, change the action of the parts affected, or, by their reſtringency, prevent that ſecretion which has been the cauſe of the irritation.

The aqua calcis, aq. kali, balſamum copaibæ, or decoct. corticis, ſeem to be the propereſt remedies in the abſence of fever. From three to ten drops of the aq. kali, or balſam. copaibæ, according to the age of the child, will be a proper doſe, and may be taken three or four times a day, as the urgency of the complaint may require.

After appearances of being perfectly well, the urine, in ſome inſtances, has become as turbid and mucous as at firſt, and the former irritation returned. In one ſuch caſe, the complaint ſeemed to yield to an infuſion of the golden-rod, of which two or three table ſpoonsful were taken three times a day. To this the mother of the child had been adviſed by one of her friends, upon the complaint returning ſome time after I had declined my viſits.

ISCHURIA RENALIS, *or* SUPPRESSION *of* URINE.

THIS dangerous diſorder is eaſily diſtinguiſhed from the iſchuria veſicalis, or ordinary ſuppreſſion of urine, in which the ſecretion is duly made in the kidneys, and the urine conducted to the bladder; but being detained there, the accumulation is readily diſcovered both by the pain and tumour in the regio pubis. In the iſchuria renalis, on the other hand, the urine is not ſecreted at all: but the ſuperabundance of watery fluid is retained in the blood.

This diſorder, I believe, is more common in adults, eſpecially elderly people, than in childhood, and is a true palſy of the kidneys. In ſuch inſtances, if the ſecretion be not reſtored in about twenty-four hours, the ſuppreſſion has uſually proved fatal very ſoon; though it is not commonly preceded by any conſiderable derangement of the general health.

In theſe reſpects it correſponds with the iſchuria of infants; for the firſt, and a very accurate account of which dangerous diſorder, we are obliged to Dr. WILLAN, who happened to meet with ſeveral inſtances of it within a ſhort ſpace of time. In each of theſe, the diſeaſe was

introduced by ſimilar ſymptoms, a ſlight feveriſh heat being obſerved for about a week, accompanied with diarrhœa, and ſometimes bilious vomiting. Towards the end of this time the urine was made in ſmall quantity, and in about twenty-four hours the diſcharge of it entirely ceaſed, and the patients died unexpectedly, without complaining of pain or any particular uneaſineſs.

Inflammation of the meſentery is judged to be the ſource of the firſt ſymptoms; and the ſuſpicion has been ſupported, in one inſtance, by an examination of the parts after death. A gangrene alſo, which had taken place, Dr. WILLAN conceived to be the cauſe of the fatal ſuppreſſion of urine; but in a ſubſequent inſtance, it was found otherwiſe, the patient being perfectly recovered from the ſuppreſſion, and apparently reſtored to health by the application of leeches to the belly, and a bliſter near to the os ſacrum; but the child died about a month afterwards with ſymptoms of dydrocephalus, diſtinctly marked.

The above mentioned remedies, with gentle purges, clyſters, and cooling diuretics, and the repeated uſe of the warm bath, are probably, every thing that our art has to offer for the cure of this novel diſeaſe in infants; and were its

ſymptoms more diſtinctly marked, or formidable in their firſt appearances, ſo as to lead to a recourſe to it on the earlieſt approaches of the diſorder, the remedies might be oftener ſucceſsful than they have hitherto been.

THE GRAVEL.

ALTHOUGH we ſee children of almoſt every age afflicted with ſtone in the bladder, and ſuch frequently voiding gravel mixed with their urine; the gravel is, by no means, a common complaint to others. I have, however, been ſeveral times conſulted for children, under three years of age, who have been ſo affected.

The diſorder, I believe is uſually ſlight at this early age, and merely accidental, ſometimes diſappearing of itſelf in a few days, or after taking only a little oil and manna, or other ſoft laxative, and ſome of the demulcent medicines recommended for the iſchuria è muco. In other inſtances, I have directed a decoction of marſh-mallow and parſley roots, or the infuſion of ſweet-fennel and wild parſley ſeeds, ſweetened with ſyrup of marſh-mallows, or honey. A bit of caſtile ſoap, alſo may be diſſolved in milk and taken as a breakfaſt, or ſupper; or a few drops of balſ. copaibæ, be adminiſtered two or

three times a day, and the body kept open by the kali tartarisatum, or the sal polychrestum.

Should the complaint continue long, and the quantity of gravel increase; as much *Seltzer* water should be drank daily as the age of the child may admit. If it be attended with much pain, the warm-bath would, probably, be useful; but I have never known it so great as to require any kind of opiate.

INCONTINENCE *of* URINE.

THIS is not a very common complaint, I believe, in children, unless combined with the stone in the bladder, and then is not so constant, nor to the degree that is intended here. It is an involuntary flow of the urine, sometimes by day as well as during the night; arising, I apprehend, from a relaxation or other affection of the sphincter of the bladder, as in very old people, but is not attended with manifest fever, nor symptoms of decay. An affection of this kind, in which the urine runs away in the sleep only, is more common; and I have known it continue to the age of fifteen or sixteen years when not properly treated, and afterwards yield to sea-bathing. If, however, it be an original affection, and confined only to the night, (when

every part is more difpofed to relaxation) and the child be young, it ufually difappears as the child grows up, and thereby acquires ftrength; but it may be often affifted in the mean time, merely by exercife, living on dry food, dafhing the contiguous parts with cold water, and fuch little means as may tend to impart tone to the fphincter mufcle and neck of the bladder, and fcrupuloufly abftaining from drink near the time of going to bed.

The total incontinence generally comes on gradually, and is fometimes attended with exceffive gonorrhœa, even in very young children, and is more difficult of cure: fo likewife, if the complaint fhould fucceed to other diforders, as the ftone, inflammation of the neck of the bladder, or forcible ufe of the catheter; and efpecially, if it follow any fomniferous difeafe, or a palfy of any other part of the body.

Tincture of catechu, or of gum kino; the cortex peruv. balfam. copaibæ, and vitriol. album, may be made trial of; but nothing is ufually fo effectual as repeated blifters applied over the os facrum; with proper dofes of the tinctura cantharidis, given in fome foft emulfion. This may be adminiftered in dofes of ten or fifteen drops to children from five to ten years of age, and increafed to two fcruples and a drachm;

which has generally removed the complaint if there has been no morbid affection of the ſpine, as is ſometimes the caſe. If theſe means ſhould fail, recourſe ſhould be had to ſea-bathing.

POLYDIPSIA, or EXCESSIVE THIRST.

THE affection here adverted to is not a ſymptomatic, but idiopathic diſeaſe, though it ſeems to depend, indeed, upon an idioſyncraſy; and is equally incident to children, as to adults. It is, however, ſo rare a complaint in either, that but little can be ſaid of its true nature, there being but few inſtances of it, I believe, upon record. Of theſe, one began at, or ſoon after birth, and another when the child was about four years and a half old; a ſhort time before it was ſeized with the natural ſmall-pox. The former is now an adult woman, and mother of eleven children, in whom the diſorder ſtill continues in a very extraordinary degree. The latter is yet a child, and from the laſt accounts, is very lively, and though apparently healthy, drinks every twenty-four hours ten quarts of water, and makes daily twelve of urine, as pale as the water he drinks. Through the day he requires a draught every half hour, and once every hour in the night.

Dr. SIMMONS, I believe, gave to the public the firſt accounts of polydipſia, as idiopathic, and has been at great pains, in aſcertaining the facts. BOERHAAVE, indeed, ſeems to ſpeak of ſuch a complaint; and ZUINGERUS of immoderate thirſt as a very comon affection of young children, coming on without fever or any other complaint, unleſs it be a laſſitude of the extremities: ſays, the appetite continues very good, but the deſire for drink ſo great, that on withholding it, they expreſs vehement diſpleaſure, and are threatened with convulſions, and other nervous diſorders. He does not, however, allude to the quantity that ſuch children require, and adds, that in a little time their bellies become tumid; that they are ſubject to glandular affections, and fall into atrophy. On theſe accounts, this ſpecies of polydipſia ſeems to have no relation to the caſes adduced.

The above mentioned inſtances of it occurred in *France*; and one has been met with in *Stanground*, near *Peterborough*, in an adult man near fifty-five years old, in whom the affection firſt took place after an intermittent fever, when he was in his twenty-ſeventh year. A ſimilar caſe alſo preſented about three years ago at the *Middleſex* hoſpital. This was in a child, but the

thirſt was not in this inſtance ſo great as in the aforementioned ones.

Though I can, indeed, have nothing to offer with any confidence, for the treatment of a diſorder which I have never yet ſeen, and which depends upon a peculiar temperament of the body; yet this rare and curious diſeaſe appears worthy of ſome notice, in a work that is thought to comprehend a more complete account of the diſorders of children than has hitherto appeared. A ſlight record of it will alſo poſſeſs the further advantage of appriſing practitioners of there being ſuch a complaint; which it is preſumed cannot fail of being acceptable, if any, into whoſe hands the work may fall, ſhould meet with children who have any evident tendency to it.

How far internal tonical medicines, with the cold-bath and electricity, or attempting to promote inſenſible preſpiration, might tend to a removal of it, upon its firſt approaches, though I can by no means venture to ſay; they may, poſſibly, be worthy of trial. Perhaps the plan lately adopted with ſucceſs by Dr. ROLLO of *Woolwich* in the *diabetes,** might likewiſe be ventured upon. This refers equally to regimen and medicine. Hepatiſed ammonia makes a chief part of the latter, adminiſtered at firſt in

* *Notes* of a *Diabetic Caſe.* 1779.

very ſmall doſes. The diet ſhould conſiſt of milk, with lime water, for breakfaſt and ſupper, and animal food for dinner, and that long kept, and very fat, without the leaſt vegetable, bread, or other farinaceous ſubſtance. Confinement to the houſe, and reſt, are alſo ſtrictly enjoined. But if none of the above means, nor any other remedies that may be ſuggeſted, ſhould pretty ſoon afford any degree of relief, it is preſumed, that no violence ſhould be offered to ſo peculiar a temperament, leſt ſome worſe or real evil ſhould appear in its place.

DIABETES INFANTILIS.

THIS complaint is related by MORETON in his *Phthiſiologia*, and is worthy of notice in this place; but it is not an idiopathic diſeaſe like the former. He mentions it as not being a common diſorder, and terms it a conſumption from diabetes; attended with great thirſt, as in the aforementioned diſeaſe. He ſpeaks of it as the effect of irritation from teething, and as a family diſorder, having been fatal to all the male children in one, except the laſt infant, to whoſe aſſiſtance he was called at the commencement of

the thirſt, and increaſed ſecretion of urine; which was ſweet as in the diabetes of adults.

This child, therefore, appears to have been ſaved by the treatment he adopted, but was not entirely free from complaint, as he had rightly foretold, until all the firſt teeth made their way. In the progreſs of the complaint, the Doctor remarks, that the diabetes was attended with conſiderable diarrhœa, under which the infant waſted faſt, but without cough. The treatment, in the mean time, conſiſted in confining the child ſtrictly to a milk diet from the firſt; and to allay the exceſſive thirſt, he allowed only milk mixed with the *Iſlington* chalybeate water. This plan very ſoon became uſeful; but the ſymptoms recurring with aggravation whenever a tooth was making its way, the Doctor was induced to adviſe a few grains of rhubarb every morning, and a little dioſcordium at bed-time. Theſe means were perſevered in for two years, that is, until the firſt teething was completed; after which the child enjoyed perfect health.

THE SEVEN-DAYS-DISEASE, *and* PECHEGUERA *of Spaniſh South-America*.

I Shall cloſe this part of the work with a brief account of two very extraordinary diſor-

ders, which ſhould have been noticed among the earlier complaints of infants, if they had been diſeaſes of this country, or even much known in other parts of *Europe*. As the *ſeven-days-diſorder* has, however, actually made ſome appearance in this quarter of the globe, and may therefore at ſome future period, become more common, it may be proper it ſhould be mentioned. The following account is tranſlated from the *French* of Mr. *Le Febure de Villebrune*, who refers to the *Spaniſh* work of *De Ulloa*, (*Diſc.* XI. § § 19 and 20) and *Barrère's Voyage to Guinea*.

§ 19. The diſeaſe of ſeven days of new-born infants is common in both quarters of *America*, and equally dangerous in the high, as in the low parts. A great number of infants die of it, without any ſymptom antecedent to its acceſſion, leading to a ſuſpicion of it. They are, on the contrary, apparently healthy and robuſt, when the diſorder makes its attack in the form of epilepſy; and few of thoſe who are viſited with it are found to recover. Though it has been ſaid, this complaint is not altogether unknown in *Europe*, it is neither ſo common, nor ſo dangerous. It is conceived that the beſt preventive would be to guard infants from being

expofed to the wind, till the firft feven days are over.

This imperfect account allows of very little comment; but it feems probable, that this diforder may not be very unlike the *Tetanus* of the *Weft-Indies*: and from the mode of prevention propofed, the difeafe may be owing to fome local cuftom or circumftance, as Dr. CLARKE has noticed in regard to the latter.

§ 20. But infants at *Guaneavelica* are ftill liable to another very extraordinary complaint. Having efcaped the feven-days-difeafe, they thrive well until the third or fourth month; they are then feized with cough and pulmonic affections, which they there call *pecheguera*. The complaint goes on increafing without any fenfible relief from the medicines made ufe of; and a fwelling taking place, they prefently die. The diforder attacks only the *white people*, or children of the *Spaniards*; the *Indians* and the *mongrels* are not fubject to it. The way to efcape it, is to remove infants from the fpot, before they are two months old, and to carry them to more favourable climates, into one of the *Zuebrades*, (or low grounds between the mountains) that are at a little diftance. It is imagined, that the cold and intemperature of the climate is the

occaſion of infants being ſo ſoon ſeized with this complaint. This may be the caſe in ſome degree; but the vitiated habit of body of their parents, and the ſulphurous vapours continually ariſing from the furnaces for the extraction of mercury, may likewiſe contribute to it. In fact, theſe vapours are ſo abundant, that when reunited by means of the cold, they form ſuch a thick cloud in the atmoſphere, during the ſeaſon there called ſummer, as to cover all the colony. *Notic. American. Diſc.* II. *p.* 205. L.

THE END OF THE FIRST VOLUME.

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